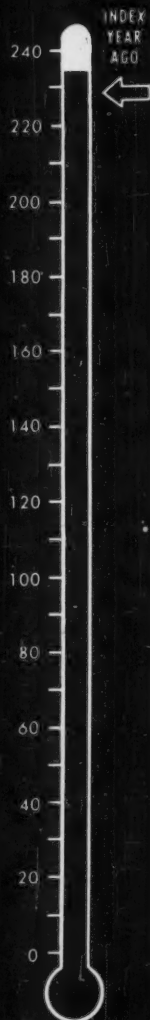


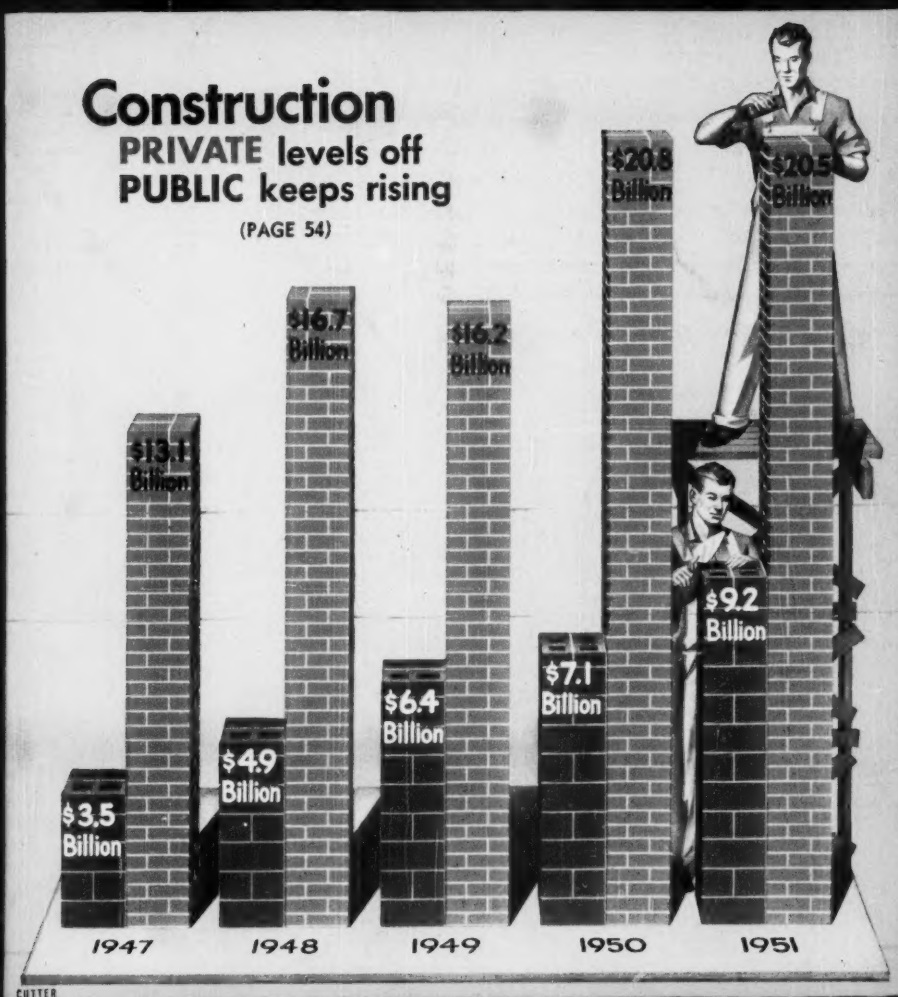
# BUSINESS WEEK



## Construction

**PRIVATE levels off**  
**PUBLIC keeps rising**

(PAGE 54)



A MCGRAW-HILL PUBLICATION

DEC. 22, 1951

TWENTY-FIVE CENTS

One of a new series of advertisements designed to tell the G-E Silicone Story to industry.

## HOW YOU PROFIT FROM G-E SILICONES'

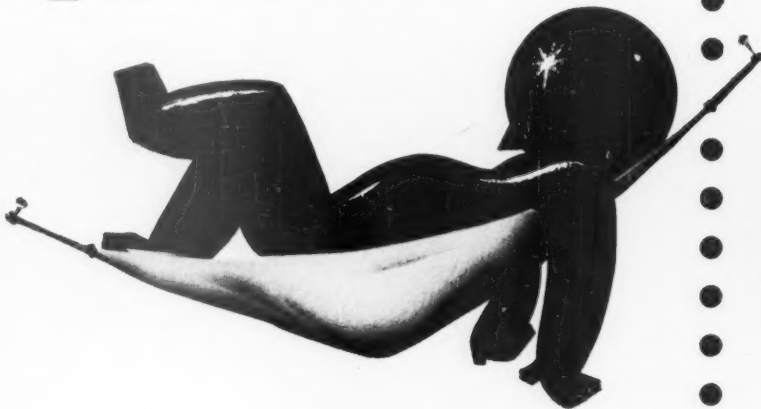
# Refusal to React

Usually products are promoted for what they *do*. But here's a case where a product is valuable because it *refuses* to act.

General Electric silicones are *inert*. They won't react with metals, rubber and many chemicals. This characteristic makes them important in many applications where corrosion or deterioration is a problem.

For example, paints properly formulated with G-E silicones are amazingly resistant to the effects of sunlight, moisture and weathering. Parts made of G-E silicone rubber remain non-adherent to contacting metal surfaces even under severe operating conditions.

Have you a problem an inert material could solve?



### HOW CAN YOU PROFIT FROM G-E SILICONES?

In addition to being inert, G-E silicones resist heat and cold, provide release from sticking, and have many useful surface characteristics. Chances are there's some way in which these remarkable properties of G-E silicones can prove valuable to *you* in *your* business. Write us for a free copy of the informative brochure, "The Silicone Story." Address Section N-4, General Electric Company, Waterford, New York. (In Canada: Canadian General Electric Co., Ltd., Toronto.)



### Silicones Add Value to Valves

Gaskets molded of G-E silicone rubber are utilized in vacuum-tight valves in mercury vapor power plants. Silicone gaskets are not affected by the mercury vapor, nor by the high heat. G-E silicone rubber remains stable and flexible from -85 F to +500 F.



### Silicones Help the Chemist

G-E silicone greases are being used as stopcock lubricants on measuring burettes. Silicones resist the effects of many chemicals and are non-corrosive to metals.

GENERAL  ELECTRIC



## Telephone Folks Will Play Santa for Thousands of Kids



As you read this, telephone operators all over the country are dressing thousands of dolls for children's homes and hospitals at Christmas.

Down in Texas, other telephone people are packing gay gift boxes for remote farm families. On December 24, the pilot who patrols Long Distance cables across the lonely plains will drop them by parachute and wave a friendly "Merry Christmas" by wagging the wings of his plane.

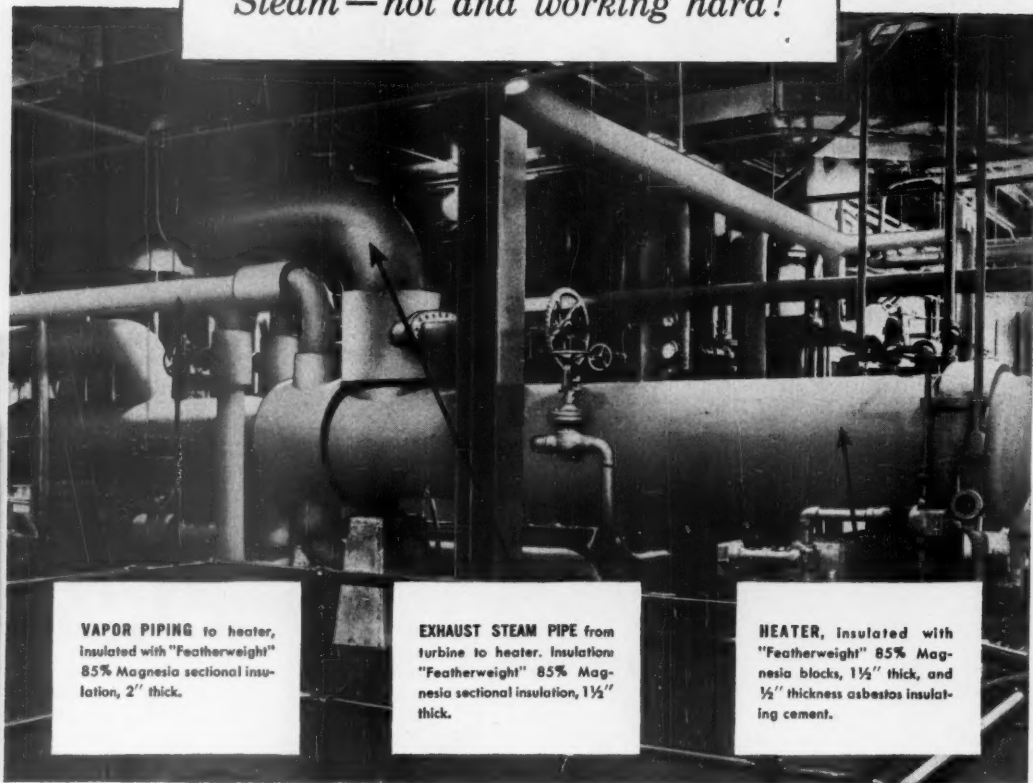
Throughout the Bell System, thousands of other telephone men and women are collecting food, candy, toys and dollars for those less fortunate than themselves.

It's a long-time telephone tradition — and a rather natural one. The spirit of service and the spirit of Christmas are pretty close together. And telephone folks try to be good citizens all year 'round.

BELL TELEPHONE SYSTEM



*Steam—hot and working hard!*



**VAPOR PIPING** to heater, insulated with "Featherweight" 85% Magnesia sectional insulation, 2" thick.

**EXHAUST STEAM PIPE** from turbine to heater. Insulation "Featherweight" 85% Magnesia sectional insulation, 1½" thick.

**HEATER**, insulated with "Featherweight" 85% Magnesia blocks, 1½" thick, and ½" thickness asbestos insulating cement.

## These Keasbey & Mattison Insulations keep heat on the job—keep heating costs down!

Steam is expensive to produce . . . and far too valuable to waste. That's why "Featherweight"® 85% Magnesia was the insulation used in this large Southwestern utility plant.

"Featherweight" 85% Magnesia gives maximum protection against heat loss—keeps steam "on the job" wherever and whenever it's wanted!

This is but one of thousands of installations of "Featherweight" 85% Magnesia Insulation—on ships, in power plants, in the chemical process and food industries. With a background of more than 60 years' service, "Featherweight" is today one of the most widely used and favorably accepted insulations for temperatures up to 600° F. When used in combination with

K&M Hy-Temp Insulation, "Featherweight" 85% Magnesia is efficient and practical for temperatures up to 1900° F.

Ask your distributor, who is also an experienced applicator, for complete information on "Featherweight" 85% Magnesia, or any insulations in the complete K&M line. Or, write us.

### The newest development in thermal insulation: "KaytherM" High Temperature Blocks

A product of years of research and development! "KaytherM" provides maximum efficiency up to 1500° F. It is molded to size . . . incombustible . . . insoluble in water . . . has exceptional strength and high dimensional stability . . . is light in weight . . . easy to handle . . . quickly applied. Available in flat blocks 6" x 36"; in thicknesses of 1", 1½", and 2".

*Nature made Asbestos . . .  
Keasbey & Mattison has made  
it serve mankind since 1873*



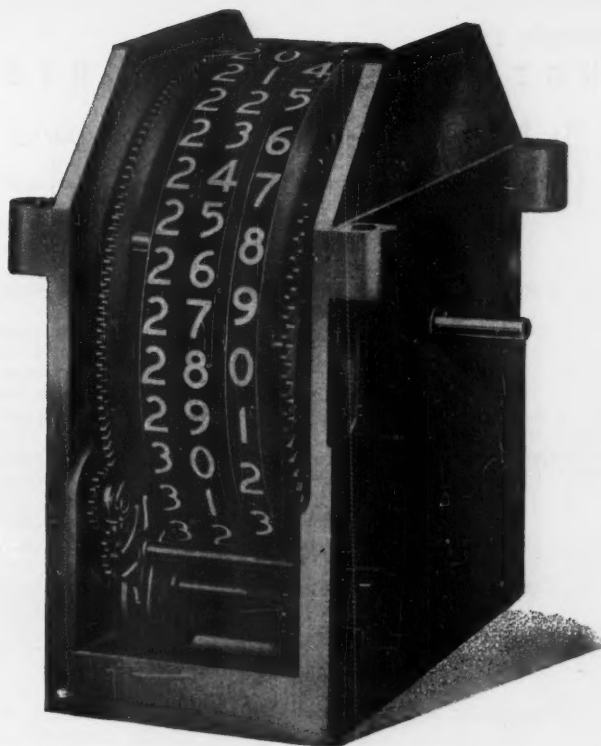
**KEASBEY & MATTISON**  
COMPANY • AMBLER • PENNSYLVANIA

IN CANADA: ATLAS ASBESTOS CO., LTD., MONTREAL, TORONTO, WINNIPEG and VANCOUVER



*It helps  
Gunners  
to "Bear On  
Target"*

Added Evidence  
that



# Everyone Can Count on VEEDER-ROOT



This is a 360-degree bearing counter... equipped with high-speed Geneva transfer and large, readily readable figures... which speeds the work and heightens the accuracy of gunnery. And it might well be adapted to bring the same advantages to many other operations in defense work.

Now if your imagination is stirred by this suggestion, then you can count on Veeder-Root to help you add up to something that will really count to **YOUR** advantage.

## VEEDER-ROOT INCORPORATED

"The Name That Counts"

HARTFORD, CONN. • CHICAGO • GREENVILLE, S. C.

Montreal, Canada • Dundee, Scotland

Offices and agents in principal cities



*"Counts Everything on Earth"*

Excerpts from  
**ENGINEERING REPORTS**  
 R. R. to H. W. C. to 8/30/50

Company "A" — pointed out considerable savings possible by shifting to Nylclad. Purchasing Department estimated this totals almost \$50,000 for the year.

Company "B" — large motor manufacturer has made extensive tests with Nylclad. Savings resulting from use estimated \$20,000. Engineer stated that none of competitive wires checked were nearly as good as Nylclad from heat and pressure resistance standpoint.

Company "C" — This manufacturer of special equipment has approved Nylclad on the basis of chief engineer's recommendation. Most enthusiastic about its resistance to the solvent action of hot varnish.

Company "D" — Winding foreman, previously highly critical, said, "Nylclad is great stuff — it got me out of a hole." He liked the high abrasion resistance against winding abuse.

Company "E" — Chief Engineer says Nylclad is the answer to many of his company's winding problems. Results of tests exceptionally good, particularly the resistance to softening under heat.

Company "F" — Engineer, after testing Nylclad, told buyer he was convinced it was excellent wire and recommended its use. He noted its uniform solderability.

NYLCLAD MAGNET WIRE combines the desirable properties of Formvar and Nylon types. Its tough, durable coating eliminates the need for paper- or textile-covered wires (in many applications) and reduces winding space requirements. It solders uniformly at 1050° F. Nylclad\* provides increased toughness to resist winding abuses, increased solvent resistance, and resistance to softening under heat and hot varnish; it is not subject to solvent crazing. Nylclad's "slipperiness" means improved windability — more compact coils — many over-all plus values at no increase in price.

BELDEN MANUFACTURING CO.  
 4689-A W. Van Buren Street  
 Chicago, Illinois



**Nylclad**  
 by **Belden**

**THE MAGNET WIRE WITH THE PERFECTED INSULATION**

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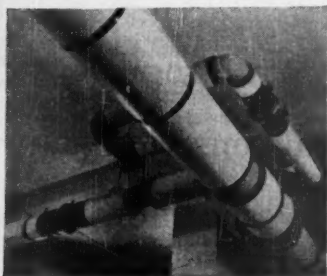
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BUSINESS WEEK • Dec. 22, 1951

## What's U.S. Rubber doing in Stuyvesant Town?



**CHECKING** a U.S. Expansion Joint at control station in basement of Stuyvesant Town. The joints prevent the whistle of steam (as it goes through the pipe) from reaching the apartments above.



**PAIR OF JOINTS** in secondary line leading from main steam line. This system operates under vacuum.



**THIS EXPANSION JOINT** was installed in a New England power plant in 1924. Recent examination showed it to be in fine condition, despite having been in continuous operation since its installation.

"U.S." performs many, many different functions in Metropolitan Life's vast apartment community in New York City. For example, the tenants are never annoyed by steam whistling through the heating pipes. Expansion joints designed and built by U.S. Rubber engineers isolate such sound. These valuable products are at work in every type of industry, eliminating noise and vibration in all kinds of pipe systems, compensating for expansion, contraction and axial and transverse movement. "U.S." engineers make expansion joints that are fire resistant and resistant to oils, gases, acids and other chemicals. Write to:

PRODUCT OF

**U.S. RUBBER**  
SERVING THROUGH SCIENCE

**UNITED STATES RUBBER COMPANY**

MECHANICAL GOODS DIVISION • ROCKEFELLER CENTER, NEW YORK 20, N. Y.

# "Painless way"

to better production at lower cost:

Put an Employers

Mutuals Team

to work for you,

with you on

a practical

safety program

that conserves man-

power, machines and materials by

reducing costly accidents. This "team-

work" may easily bring you spectacular

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costs, too!

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Employers Mutuals write: Workmen's Compensation-Public Liability-Automobile-Group Health and Accident-Burglary-Plate Glass-Fidelity Bonds-and other casualty insurance. Fire-Extended Coverage-Inland Marine-and allied lines. All policies are nonassessable.

EMPLOYERS MUTUAL LIABILITY INSURANCE COMPANY OF WISCONSIN  
EMPLOYERS MUTUAL FIRE INSURANCE COMPANY



## In BUSINESS this WEEK . . .

### • Hunting New Scandal . . .

. . . before it breaks in the open is the job handed Judge Thomas F. Murphy. Object: to clean up Truman's house well before elections. P. 24

### • Hunting Materials and Equipment . . .

. . . industry is pushing its spending for new plants and equipment close to the ceiling. P. 22

### • Hunting a Settlement . . .

. . . that will get the union the package it wants, Philip Murray's Steelworkers have put real teeth in their strike threat. P. 30

### • Hunting Stray Ripples . . .

. . . on the wavelengths is a problem the Federal Communications Commission is throwing in the lap of a lot of industries. P. 40

### • Hunting Customers . . .

. . . nowadays is very likely to mean looking westward—and looking in the suburbs. P. 75

### • Hunting Weaknesses . . .

. . . in Mao's China is a tough assignment. Since Korea, the Communist leader has actually tightened his hold. P. 93

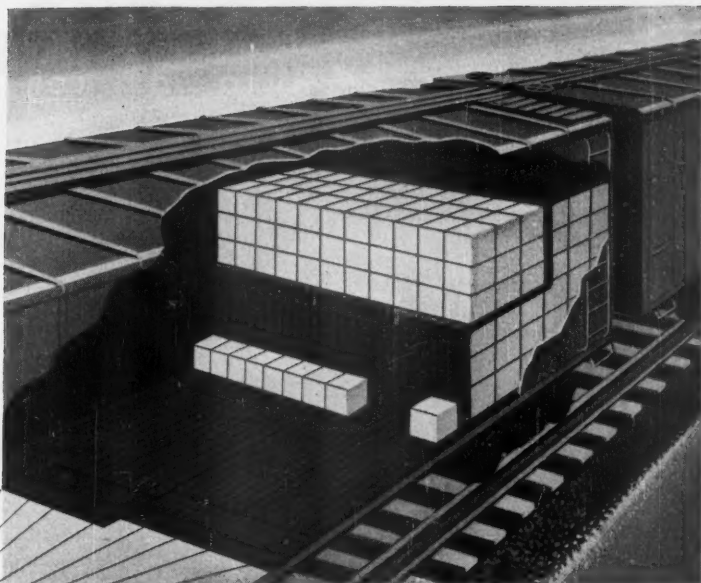
### • Hunting Ideas . . .

. . . from the working levels, Johnson & Johnson came up with a new approach that works—the syndicate system. P. 48

## THE DEPARTMENTS

Business Abroad . . . . .	93
Business Outlook . . . . .	9
Construction . . . . .	54
Defense Business . . . . .	88
Figures of the Week . . . . .	13
Finance . . . . .	78
International Outlook . . . . .	91
Labor . . . . .	30
Management . . . . .	48
Marketing . . . . .	66
The Markets . . . . .	86
New Products . . . . .	46
Production . . . . .	40
Readers Report . . . . .	62
The Trend . . . . .	100
Washington Outlook . . . . .	15





**Shock absorber made of paper.** Sudden stops and starts can smash cargo piled at the very end of a freight car. However, when the entire end of the load is bound into a unit by hundreds of threads of "Cordura" laminated between sheets of paper, it acts like a shock absorber . . . substantially reducing breakage.



## It often costs less to use this Du Pont yarn

The extra strength of Du Pont Cordura\* High Tenacity Rayon makes it possible to replace large cords of natural fibers with smaller gauge cords of "Cordura" yarn. In this way you can reduce the size of a strength section, and also the amount of carcass required . . . often making your product better, and less expensive.

This is why "Cordura" is used to make conveyor belts thinner yet stronger, hoses lighter yet safer, tires that are cooler running, and V-belts that are smaller and more efficient.

Just as the extra strength of "Cordura" is the backbone of these improvements, its extra strength may be useful to you, no matter where you use yarns in your business . . . and without increasing cost.

\*REG. U. S. PAT. OFF.

# Du Pont "Cordura" High Tenacity Rayon

**STRENGTH AT LOW COST**

for RAYON . . . for NYLON . . . for FIBERS to come . . . look to DU PONT

WRITE NOW FOR THE FREE BOOKLET "Sinews for Industry." It gives physical properties of "Cordura" . . . tells you how Du Pont will help you benefit from the advantages of "Cordura" Rayon. Address: Rayon Division, Room 4421, E. I. du Pont de Nemours & Co. (Inc.), Wilmington 98, Delaware.



BETTER THINGS FOR BETTER LIVING  
... THROUGH CHEMISTRY

Name \_\_\_\_\_  
Company \_\_\_\_\_  
Address \_\_\_\_\_



PUTTING *Air* TO WORK FOR FIBERGLAS



Without an infallible air supply at many process stages, Owens-Corning could not make their famous Fiberglas.

## FAN THE FIRE TO MAKE A MILLION MARBLES

These machines swallow glass at 2200°F, spit out 320 red-hot marbles a minute. In one day, they produce more than a million marbles to feed forming machines turning out a multitude of famous Fiberglas products.

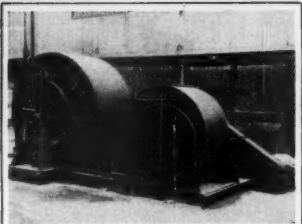
Air plays a vital role in many ways in glass making. Take, for example, the combustion air to the glass furnace. If it failed for only a short time, the entire melt would be lost and it would require a week to rebuild the furnace. And throughout this huge plant, over

150 Sturtevant fans like those pictured at right give production an assist by putting air to work in both cooling and heating processes.

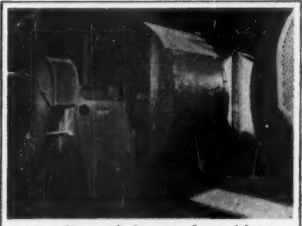
Our specialty is making air work for you . . . with a complete line of air handling, air conditioning and air cleaning apparatus. For help on your problem, call your local Westinghouse-Sturtevant office, or write Westinghouse Electric Corporation, Sturtevant Division, Hyde Park, Boston 36, Massachusetts.

YOU CAN BE SURE...IF IT'S  
**Westinghouse**

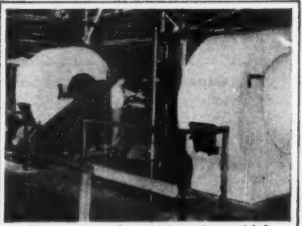
J-80242



Sturtevant fans keep furnace exteriors cool, prevent refractory brick from disintegrating.



Tiny fibers of glass are formed into Fiberglas mat by air, put to work with Sturtevant fans.



Heavy-duty fans drive air at high temperatures through Fiberglas mat to cure bonding agent.

# BUSINESS OUTLOOK

BUSINESS WEEK  
DECEMBER 22, 1951



Steel output pushed to the highest mark ever this week—even as mill men wondered if a year-end strike would close them down.

Operations were scheduled, as the week started, at 104.9% of rated capacity. That's high enough to yield 2,097,000 tons unless the weather was bad enough to hold mills short of the target.

Best previous rate was 104.5% in the week ended Oct. 29.

Some steel production is bound to be lost over the next two weekends. This is true even though steel, officially, doesn't observe holidays.

The very nature of the "long weekends" will lead to absenteeism.

But there's more to it than just the matter of staying home.

There's the question of no contract, no work on Jan. 1.

Loss of a week's steel output—at a time when it can ill be afforded—now seems a real possibility.

Until this week most labor experts had felt that the government would be able to ward off a strike. Now they doubt that action can be taken fast enough (page 30).

An agreement on wages will require an understanding on prices. The two can hardly be welded together by Jan. 1.

Enjoining the steelworkers under Taft-Hartley would ward off a strike. However, time is short, and Washington has no stomach for an injunction.

It's more likely that a deadlock would be sent to the Wage Stabilization Board (page 16). By the time the union's leaders voted on whether or not to accept the board's jurisdiction, several days' output would have been lost.

If a strike looms, furnaces will have to be banked before Jan. 1. And it will take a few days to get back to full blast after workers return.

Such a prospect, obviously, makes steel look just that much tighter. With operations near 105%, lost output clearly can't be made up.

Availability of steel will play a major part in the speed with which manufacturers can build and tool new plants.

Planned outlays for the next three months top \$3-billion, according to the quarterly survey by the Dept. of Commerce and the Securities & Exchange Commission. That would be the biggest first quarter by a wide margin.

However, experience throughout 1951 has been that spending hasn't come up to plans. Tools, even more than building materials, are tardy.

Lagging plant expansion is exasperating. Yet it cannot be emphasized too often that money not spent this year is carried forward. This assures good business well into 1952 for makers of production equipment. And when capital goods are booming, there's little to fear for general business.

New figures now are available showing what manufacturing lines are expanding and how fast.

This is a breakdown of the Commerce-SEC report on capital outlays.

Largest postwar capital expansion, relative to 1945 book value, has been in chemicals, electrical machinery, and motor vehicles, Commerce's Survey of Current Business points out (December issue).

# BUSINESS OUTLOOK (Continued)

BUSINESS WEEK

DECEMBER 22, 1951

Durable goods industries laid out \$756-million for new plant and equipment in 1939. By 1948 the figure was nearly \$3½-billion. And the estimate for this year tops \$5.2-billion for a new record.

Expansion in steel is the biggest among durables. It has risen from \$122-million in 1939 to \$772-million in 1948 and \$1.3-billion now.

There's one category on the nondurable side, however, that tops these figures. That's fuel, mainly petroleum. Its expansion is running over \$2-billion now, against \$403-million in 1939.

And chemicals, spending \$1¼-billion on expansion this year, are only a very little behind the steel industry.

Raising cash is an increasingly important problem for business.

Expansion costs more and more money. High inventories and generally large receivables tie up working capital. Meanwhile, taxes reduce the profit that can be retained for quick and fixed capital.

To top this off, the rent on new money has gone up another notch.

New York's Chase National Bank this week boosted the interest charged its very choicest customers to 3% from the recently prevailing 2¾%.

One metal has come down off its high horse in world markets. Within the last few days premium prices for lead have vanished.

Britain kicked the props out. Future business will be done by the United Kingdom at not more than our 19¢ ceiling on imported lead.

Dollar shortages are believed one reason. Neither Canada nor Mexico, leading suppliers of Britain, is interested in payments in soft currency unless there's a high premium.

Relative softness in the lead market has brought a lot of hoarded scrap out of hiding. The same cannot be said for other secondary metals, however, where scrap is sold reluctantly at ceiling prices.

Use of cotton in this country in the first four months of the season has fallen half-a-million bales behind last year's record rate.

Consumption for the period was 3.1-million bales, against 3.6-million from August through November a year ago.

Daily average use for the season to date has held right around 37,000 bales. That isn't bad by past standards. But it looks a little thin against operations well above 40,000 a day late last year and early this.

Rayon and acetate are steadily rising as competitors of cotton.

Prewar, production of these synthetic fibers (reduced from poundage to bales weighing cotton's 500 lb.) ran around 650,000 bales. Capacity this year is just under 2.9-million bales, says Rayon Organon.

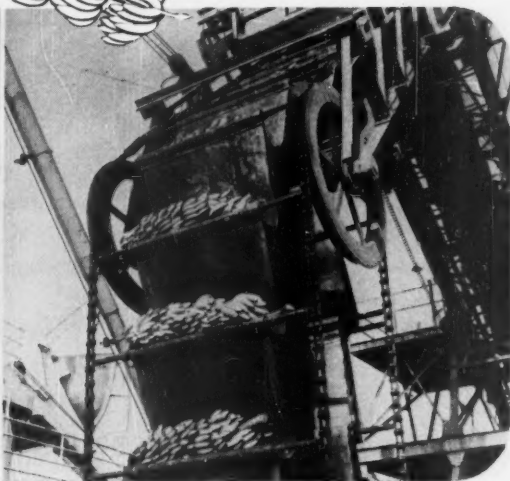
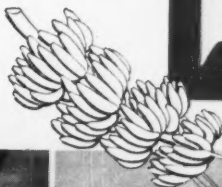
That bulletin's projection for 1953: 3.4-million bales.

If there hadn't been any cutbacks, maybe output of such things as homes and autos would have slacked off anyhow this year because of diminished demand.

Take Seattle, for example. New dwelling units started this year are estimated at 5,500 against 7,844 last year. Meanwhile, the inventory of unsold homes has risen to 668 against 326 a year ago.



**b**all bearings or **b**ananas



*... industry cuts costs through*

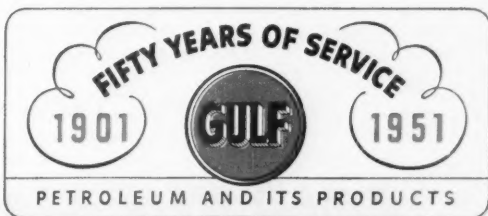
## **GULF PERIODIC CONSULTATION SERVICE**

Gulf sales and staff engineers are welcome visitors as they make periodic service calls to mines, quarries, fleets, railroads, power and industrial plants that use Gulf quality oils and greases.

For through Gulf Periodic Consultation Service they provide effective help on problems involving lubricants, fuels, rust preventives, solvents, waxes, cutting and special process oils. Their recommendations and suggestions nearly always result in lower-cost operation—and that's exactly what they have constantly in mind!

The knowledge and experience of these trained specialists can be applied profitably to your plant

or operation. Write today for a copy of the booklet which explains Gulf Periodic Consultation Service and tells what it will do for you. Gulf Oil Corporation · Gulf Refining Company, 719 Gulf Building, Pittsburgh 30, Pa.





## HOW **BLH** ENGINEERING HELPS SOLVE RAILROAD JIGSAW PUZZLES

Smoothly, America's railroads have once again shouldered the responsibility of moving the materials and men for a rearming nation. To peak civilian demands for *more* wheat, *more* meat, *more* everything, has been added the need for faster movement of tanks and guns and trucks—and the materials to make them.

It's the biggest moving job in history. And one that *only* the railroads can handle.

Without the slightest sign of strain, this most efficient of all transportation tools has increased its manpower, increased its schedules . . . absorbed a vastly increased load with hardly a ripple.

Take the switchyards, for instance. Here the unscrambling of thousands and thousands of additional cars has fabulously multiplied switching

problems. But fortunately, with B-L-H diesel switchers, the railroads now have locomotives with *more* power and *more* versatility to speed every operation. Locomotives so dependable that they work right around the clock—with only a pause every third day for refueling and an eight hour layoff once a month for maintenance.

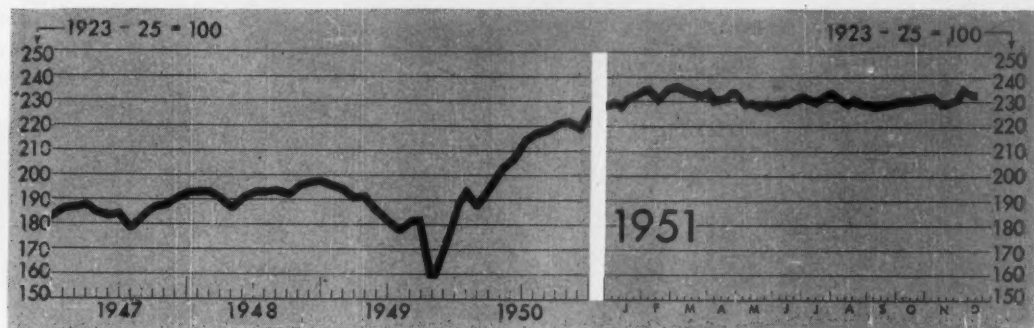
In other fields of industry, too, B-L-H engineering is improving efficiencies and helping to reduce operating costs.

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# **BALDWIN-LIMA-HAMILTON**

# FIGURES OF THE WEEK



**Business Week Index (above)** . . . . . <sup>†</sup>234.2    †234.3    231.0    229.8    173.1

## PRODUCTION

	Latest Week	Preceding Week	Month Ago	Year Ago	1946 Average
Steel ingot production (thousands of tons).....	2,097	2,081	2,073	1,944	1,281
Production of automobiles and trucks.....	117,491	†116,932	120,767	†172,350	62,880
Engineering const. awards (Eng. News-Rec. 4-week daily av. in thousands).....	\$36,305	\$37,355	\$36,758	\$68,425	\$17,083
Electric power output (millions kilowatt-hours).....	7,667	7,444	7,333	6,985	4,238
Crude oil and condensate production (daily av., thousands of bbls.).....	6,225	6,221	6,232	5,723	4,751
Bituminous coal production (daily average, thousands of tons).....	1,865	12,024	1,907	†1,929	1,745

## TRADE

Carloadings: manufactures, misc., and l.c.l. (daily av., thousands of cars).....	77	78	76	77	82
Carloadings: all other (daily av., thousands of cars).....	52	59	56	51	53
Department store sales (change from same week of preceding year).....	-1%	†+4%	+7%	+2%	+30%
Business failures (Dun and Bradstreet, number).....	143	136	109	150	217

## PRICES

Spot commodities, daily index (Moody's Dec. 31, 1931 = 100).....	457.9	462.0	457.9	498.9	311.9
Industrial raw materials, daily index (U.S. BLS, Aug., 1939 = 100).....	317.6	318.6	361.2	351.0	198.8
Domestic farm products, daily index (U.S. BLS, Aug., 1939 = 100).....	356.0	360.8	360.6	374.5	274.7
Finished steel composite (Iron Age, lb.).....	4.131¢	4.131¢	4.131¢	4.131¢	2.686¢
Scrap steel composite (Iron Age, ton).....	\$42.00	\$42.00	\$42.00	\$45.13	\$20.27
Copper (electrolytic, Connecticut Valley: lb.).....	24.500¢	24.500¢	24.500¢	24.500¢	14.045¢
Wheat (No. 2, hard and dark hard winter, Kansas City, bu.).....	\$2.55	\$2.55	\$2.54	\$2.34	\$1.97
Cotton, daily price (middling, ten designated markets, lb.).....	41.60¢	42.80¢	41.73¢	42.88¢	30.56¢
Wool tops (Boston, lb.).....	\$2.30	\$2.25	\$2.40	\$3.45	\$1.51

## FINANCE

90 stocks, price index (Standard & Poor's).....	186.1	185.6	180.7	156.4	135.7
Medium grade corporate bond yield (Baa issues, Moody's).....	3.62%	3.61%	3.56%	3.21%	3.05%
Prime commercial paper, 4-to-6 months, N. Y. City (prevailing rate).....	2½%	2½%	2½%	1½-1½%	1-1½%

## BANKING (Millions of dollars)

Demand deposits adjusted, reporting member banks.....	54,243	53,204	52,249	51,676	††45,210
Total loans and investments, reporting member banks.....	73,771	73,072	72,526	70,301	††71,147
Commercial and agricultural loans, reporting member banks.....	21,219	21,006	20,848	17,461	††9,221
U. S. gov't and guaranteed obligations held, reporting member banks.....	32,115	31,856	31,457	33,439	††49,200
Total federal reserve credit outstanding.....	24,980	25,081	24,602	21,344	23,883

## MONTHLY FIGURES OF THE WEEK

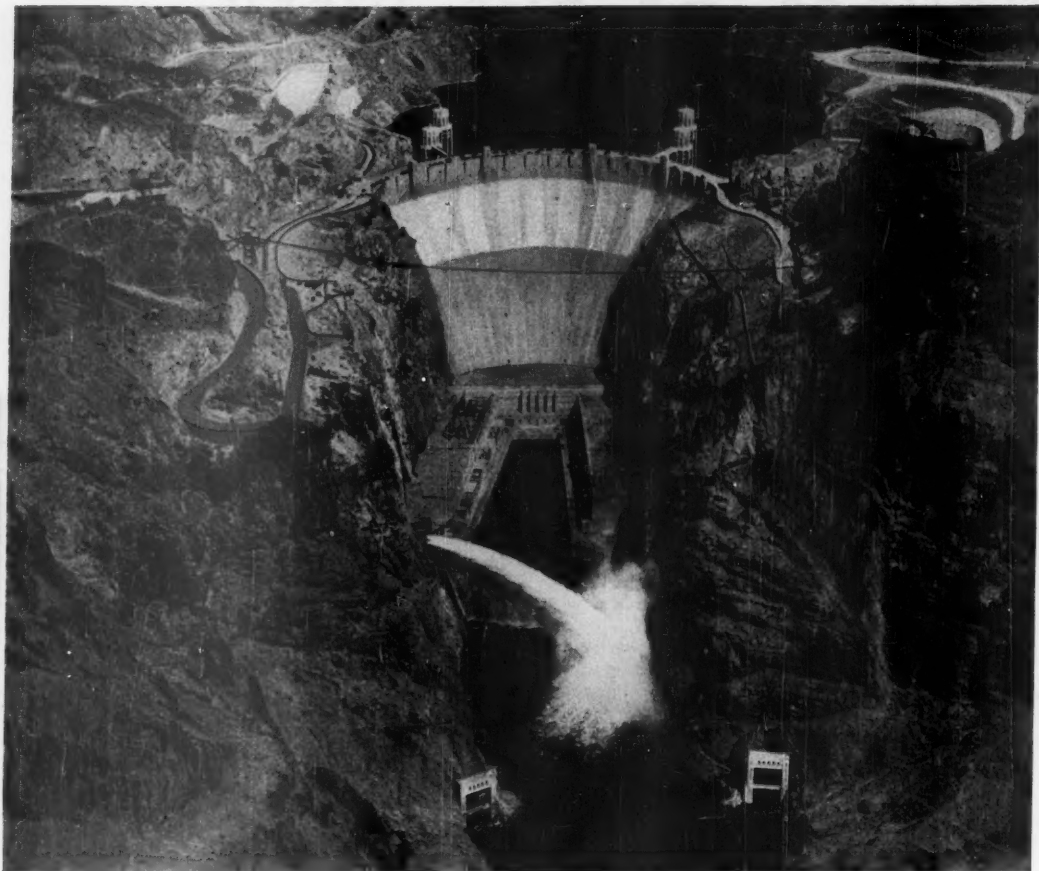
MONTHLY FIGURES OF THE WEEK		Latest Month	Preceding Month	Year Ago	1946 Average
Exports (in millions)	October	\$1,154	\$1,232	\$906	\$811
Imports (in millions)	October	\$832	\$718	\$922	\$412
Cost of Living (U. S. BLS, 1935-39 = 100) old basis	November	189.3	187.8	175.6	139.3
Average weekly earnings in manufacturing	November	\$65.25	\$65.21	\$62.23	\$43.82
Housing starts (in thousands)	November	76.0	86.0	87.3	55.5

<sup>†</sup>Preliminary, week ended Dec. 15.

††Estimate (BW—Jul. 12'47, p16).

§ Date for "Latest Week" on each series on request

† Revised.



## **POWER** *for the might of America*

Electrical life for the machines and plants that make up the industrial might of our nation! From giant Hoover Dam, more than a million kilowatts pour into the conductor arteries that keep America's wheels turning. And protecting that output are many dependable Exide Batteries—used for switchgear control.

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# WASHINGTON OUTLOOK

WASHINGTON  
BUREAU  
DEC. 22, 1951



**Defense production is badly snarled.** That's been a fact for months. But only now is Washington beginning to face up to it.

**The military services are mostly to blame.** Their buying has been haphazard. So you get this situation: Billions of dollars in contracts have been let without much regard to the availability of plants and tools. The result is a lack of balance at the production end—plant ready, but no tools to work with; or tools ready, and no plant.

**Mobilizer Wilson is being forced to take action.** You don't see much of this in your daily paper. It's a technical job, without the flashy dramatics that make headlines. But moves under way will upset contracts, tool orders, and the prospects for civilian hard goods. What's going on is of importance to every businessman and should be understood.

**The first step is installing a procurement boss.** He is Clay P. Bedford, Kaiser-Frazer vice-president, heretofore on Wilson's staff (BW—Dec. 8 '51, p23). He is shifting to Defense as an expeditor for Secretary Lovett. His big job will be to boss buying.

**It's an effort to put first things first, and it's long overdue.** Bedford will draw up a priority list for major defense items and see to it that buying is properly scheduled, with contractors getting the tools they need when they need them.

**Tools will be rescheduled.** Heretofore, tools for defense production have all carried about the same rating or priority. The result has been that tool makers, with little guidance on what to build first, have filled orders pretty much in the sequence they came in. As this has worked out, tools for less essential service items often have been produced ahead of tools for critical military needs. Now tool makers will be advised on what to put ahead and what to hold back.

**Many production plans will be upset.** A contractor making bayonets, for example, may have to wait on his equipment until a maker of critical items—say jet parts—is tooling up.

**The plant expansion program will be reviewed.** A survey of capacity idled by civilian hard goods cutbacks is under way. And indications are that new plants won't be O. K.'d when idle facilities can handle the job.

**This is something of a policy shift.** In the beginning Defense tried to scatter its orders around to encourage new plant building. The theory was that by spreading orders around, a little here and a little there, you would be broadening the industrial base and thus increasing the potential for arms output.

**But the planners have about come to the conclusion that this won't work.** It's inefficient because individual orders are small. And besides, the extra facilities required create a tremendous drain at this time. So, short term, there will be more bunching up of contracts, with much of the base-broadening left for the future.

**Further cuts in civilian hard goods are sure, starting in April.** How deep to cut in the second quarter hasn't been settled. But the talk around Wilson's office is that the cuts will be hefty. In the case of autos, scheduled

# WASHINGTON OUTLOOK (Continued)

WASHINGTON  
BUREAU  
DEC. 22, 1951

at 58% of the 1950 base in the first quarter, the cut may take production down to about 50%.

•  
**Jan. 1 steel strike is in the making**, but it won't last long (page 32). Here's the way Truman's labor advisers figure it:

**Murray's wage demands are excessive.** They add up to 30¢ an hour—twice what the wage formula will allow, even with some stretching.

**The industry is taking a stiff stand.** It's reluctant to go along on a raise as long as the Office of Price Stabilization refuses to allow a price rise.

**A settlement before the deadline is unlikely.**

•  
**Here's the government's strike plan:** If the steelworkers do walk out, Truman will send the dispute to the Wage Stabilization Board and request the union to go back to the mills until the board proposes a settlement. The expectation is that Murray will agree. Then, if the board fails to end the dispute and a real strike is called, a Taft-Hartley injunction will be used. That will keep steel rolling for 80 days while negotiations continue.

**A wage and price rise will come along in the end.** The only question is how much—how much Murray will settle for and how much OPS will allow the industry to pass on in higher prices.

•  
**The business outlook for 1952 is generally good.** That's the tone of the forecasts Truman is getting from his economists, and it will show up in the messages he will send to Congress in two weeks. Highlights:

**Industrial production will rise in the spring.** By fall it will be in the neighborhood of 235, close to record 1943's average of 239.

**Jobs will remain plentiful, over-all.** There will be some local unemployment, however, due to defense dislocations.

**Personal income will push up still more**, reflecting high employment and rising wages and salaries. The estimated rise is 6%.

**Personal consumption expenditures will rise.** The experts figure the annual rate, now about \$205-billion, will climb about 5%.

**The price trend will continue up**, with an average rise of some 3% to 5% for the year.

**Total capital expenditures will shrink**, maybe as much as 10% below this year's estimated total of \$25-billion.

•  
**But it's not all rosy.** The figures above are averages, and many companies won't fit the averages. There'll be tough going for those that are cut still more on metals and can't get contracts to take up the slack. And profits, generally, will be under pressure—squeezed by rising costs and price ceilings. Then, there are the high taxes. Corporations must earn about \$2.20, on the average, to have a buck left after taxes (BW-Dec.15'51, p19).

•  
**Treasury savings bonds may be made more attractive.** There's little disposition to raise the interest rate, now 2.9% on E-bonds held the full 10 years. But the Treasury is considering changing the rate around so that bonds held only a few years would pay a little better.

# IS YOUR SCRAP and SALVAGE PROGRAM MISSING THE BIG STUFF?



## The Steel Industry urgently needs Scrap that you may have!

The "big stuff" we're talking about is *dormant* scrap . . . the heavy equipment, machinery, tools, dies, etc. that have become obsolete, or inefficient, or just plain wornout and useless.

Dormant scrap isn't so easy to get moving because it usually requires someone in authority to say "That's no good to us any more. Let's get it out of here!" But there are an estimated several

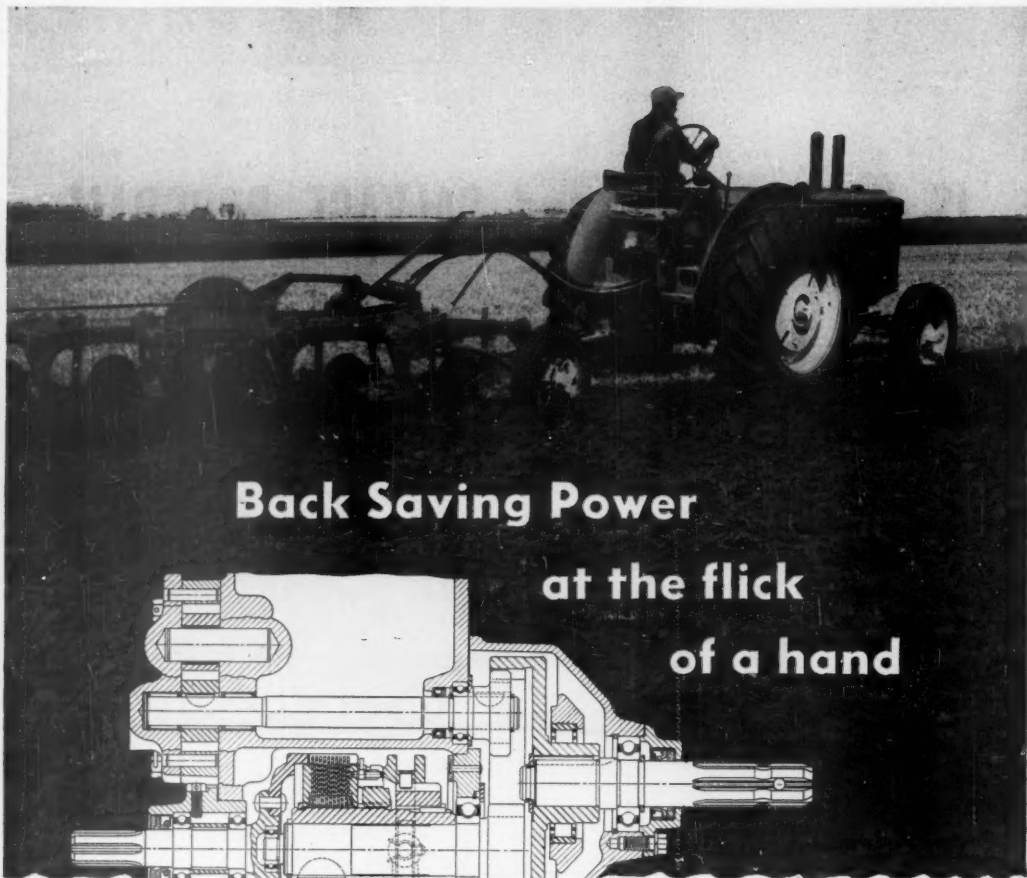
million tons of it available *now*, and thousands of steel mill representatives are calling on manufacturing plants nationwide to help dislodge it.

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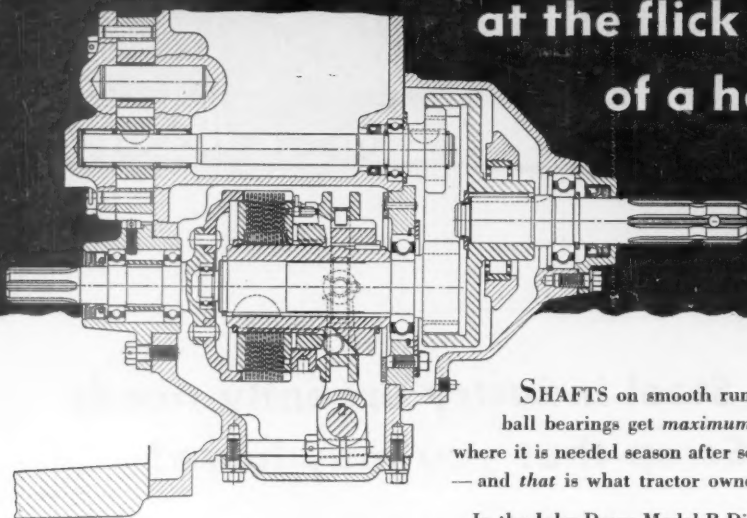
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**SHAFTS** on smooth running New Departure ball bearings get *maximum* power right thru to where it is needed season after season without change — and *that* is what tractor owners really appreciate.

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*Nothing Rolls Like a Ball*

**NEW DEPARTURE BALL BEARINGS**





**HARRIMAN** of U.S. at Atlantic Pact meeting with ...



**PLOWDEN** of Britain, Churchill's Chief Planner, and ...



**MONNET** of France, shown after a conference with Bidault.

## NATO's Wise Men: Rearm With Realism

Atlantic rearmament plans have been brought down to earth with a bump.

That's the meaning of this week's report of NATO's three wise men on the rearming capacities of the Atlantic allies. This report, when and if it's accepted by the twelve NATO governments and parliaments, will become the cornerstone of NATO economic and defense policy for the next several years.

In practice, that will mean the following things:

Europe will not rearm so heavily or

so fast as U.S. statesmen and generals had hoped. Most European nations will spend a little more on defense next year than they had budgeted for. But they'll still be way short of the defense effort called for by earlier rearmament schedules.

U.S. aid will be hiked next year if Congress goes along with the wise men's recommendations. It may top last year's figure by as much as a billion dollars. And it will be administered to permit a more flexible divvying-up between military and economic purposes.

But even so, U.S. aid will still fall short of the amount Europeans had counted on when they agreed to earlier defense schedules.

U.S. shipments of arms will be bigger next year—not only bigger than at present, but bigger than had been calculated originally.

The new plans call for a 30-odd division, combat-ready army in Europe by the end of 1952—in place of the original longer-range objective of 90-plus divisions by 1954. Under the new plan, however, the 90-division

army will probably be ready by 1956.

• **Lightening the Load**—With this shift in effort from the long to the short term, Europe won't expand its defense production to anything like the levels formerly expected. The U.S. will continue to buy armaments and military goods there, so there will still be some buildup of capacity. But a lot of big military production projects will go by the boards; the U.S. will take over the bulk of the job of rearming Europe.

This will lighten the economic load on Europe, especially by cutting military demand for industrial equipment and machine tools. There will be less of the inflation that would have resulted from investment in armament industries. And the squeeze will be taken off European hard goods export industries—which are having a rough time competing with defense industries for resources and manpower.

• **Brass Tacks**—This recommended cut-back of the European defense effort indicates that the West is ready to come down out of the clouds—to the level of economic and political realities. It reflects U.S. recognition that Europe can't carry much of an armament load and European recognition that the U.S. isn't going to dole out the amounts of aid Europe would have needed to meet Eisenhower's demand.

The French rearmament situation is a good example of how, up to now, the economic realities of rearmament have been ducked: Paris originally planned to spend the equivalent of \$4-billion for defense in 1952. This wasn't so much as SHAPE wanted, but it was roughly a billion dollars more than France will spend under the new plan. The French had counted on getting nearly \$800-million worth of direct U.S. economic aid that year—exclusive of direct military aid and U.S. military buying—to carry out the \$4-billion program. But as the facts now stand, they'll be very lucky to get half that much.

• **No Picnic for Europe**—The slash in the European defense effort next year doesn't mean, though, that the Europeans can just sit back and relax. In fact, the wise men actually recommended boosting most European nations' defense budgets—and boosting them over the maximum that the Europeans had thought was economically possible short of full-scale mobilization.

France, under the new plan, will up this year's budget by 5%—the equivalent of \$340-million—to bring its 1952 budget to a total of roughly \$3-billion. The U.S. is expected to finance roughly \$200-million of the increase with aid.

Belgium was asked by the wise men to boost its defense spending 40%, or \$140-million worth, to a \$480-million total. A lot of the increased funds

would be used to finance defense imports from the rest of Europe—for which they would get American aid. The Belgians are protesting bitterly about this recommendation. They say they have a stable, strong economy and a comfortable trade surplus because they have followed U.S. principles of free trade and competition. In Europe's economy, they form a more or less isolated pocket of stability, and they don't want to lose that advantage. Now they accuse the U.S. of pushing them to control their trade and currency by buying in places where they would not do so normally and to follow an inflationary policy in the interests of defense. The result, they claim, will be to make them as weak and unstable as their neighbors. But odds are the Belgians will go along with the wise men if the other NATO members do.

Denmark was urged by the wise men to boost defense spending by the equivalent of \$86-million over the next two and a half years.

The Netherlands weren't prodded to increase military spending next year, but were urged to do so in the two following years.

Italy also was requested to up its military spending.

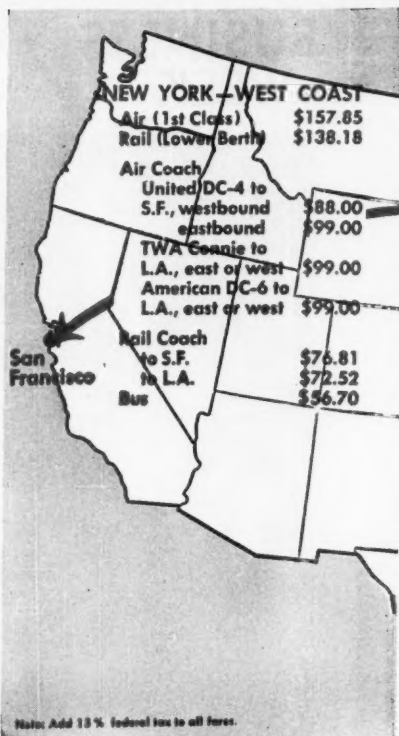
Britain escaped the spurs. Its program was O.K. as it stood. And even without any additions, nobody will be surprised if it falls a few hundred million dollars behind expectations next year.

• **Difficulties**—Both American and European economists agree the wise men's demands are maximum. Any further cut in the already low European consumption levels, for one thing, would be politically tougher than most well-fed Americans realize. But boosting European rearmament is more complex than merely a choice between guns or butter. The situation is this:

Rearmament, at this stage, falls mostly on the capital goods and construction industries. These don't supply consumer products. So cutting consumption wouldn't free the labor and materials the capital goods industries need to get on with rearmament.

Balance of payments difficulties also enter the picture: British rearmament, for example, could be kept up to schedule easily if hard goods industries could be converted to armaments production. But that would cut into exports, which are vitally needed to pay for food and raw materials. All these things add up to a serious stumbling block to rearmament.

• **No Dream**—As Administration officials see it, the wise men's report struck a realistic balance between these economic limitations and defense needs. It is the first economically realistic rearmament blueprint NATO has had.



## Air Transport:

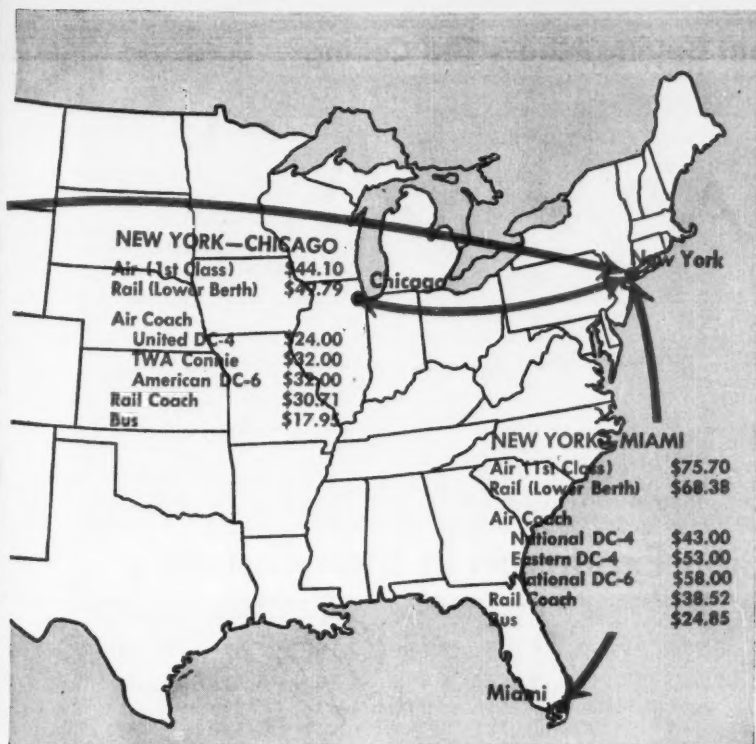
Air travel this week is on the verge of becoming a mass-transportation industry. And the Civil Aeronautics Board, which for so long fought the trend, this time is leading the way.

At the board's suggestion, most of the big domestic airlines have announced plans to increase their aircoach services and to lower their aircoach fares drastically. This will put the scheduled airlines into direct competition with the nonskeds for the first time. And it may also start the nearest thing to an out-and-out rate war that the nation's air transport industry has ever seen.

• **Luxury at a Price**—The airlines started out as a means of transportation for the rich—or at least for the well-to-do. Flying has always been a good bit more expensive than competing forms of transportation. To justify the higher price, the airlines offered, first of all, speed. But they also offered luxury—plenty of leg room; free meals; service by trained stewardesses.

When an airline wanted to get passengers away from other airlines, it didn't lower its rates (CAB wouldn't allow that). It offered more luxuries.

• **Less Leg Room**—This philosophy began to break down shortly after World



## Priced for Mass Travel

War II. At that time a lot of ex-Army and ATS pilots wanted to keep on flying. They took a look at commercial aviation, decided that luxury wasn't necessary; that speed alone could sell air travel—if the price was right.

So they bought up war surplus planes, converted them, and went into the air transport business. They cut leg room to an absolute minimum by squeezing as many seats into a plane as would fit. They cut out the free meals. They carried no stewardesses—or at most one to a plane, regardless of the number of passengers. They cut fares far below those offered by the regular airlines. And they made money.

One reason they made money is that they flew only the routes on which there was always plenty of demand for transportation—while the regular lines, to hold the franchise, had to service all the intermediate money-losing points, too. But basically, they made money because they offered a service that people wanted at a price people could afford to pay.

• **Skeds Follow Suit**—A few of the scheduled airlines got the point. Pan American inaugurated low-fare, frill-less flying between Puerto Rico and

New York. Among the domestic lines, first Capital, then TWA and others picked up the ball. But most of the scheduled lines didn't like the idea.

And, much more important, CAB didn't like it either. The board grudgingly allowed the scheduled lines to try aircoach on an experimental basis. It granted coach certificates for a year at most; sometimes for as little as six months. It insisted on a minimum of 4¢ a mile as against the nonskeds' 3½¢ or 3¢, and just a year ago it forced the scheduled lines to boost coach fares to 4½¢ a mile. For a long time it insisted that the scheduled lines offer coach service only at very inconvenient hours.

Despite these restrictions, the scheduled lines made money on their coach operations. And despite the new competition, the nonskeds' coach business continued to increase and prosper.

• **Booms First Class**—CAB, and many airline executives, had figured that low-cost air transportation was bound to cut into the business of the first-class flights. A lot of people who would ordinarily fly first class would switch to the lower-cost flights if they were available.

It was perfectly logical, but things worked out just the opposite. The coach flights not only failed to steal business from the first-class flights; they actually increased first-class business. Many people flew for the first time on the aircoaches, then upgraded themselves to first-class flights for the next trip.

• **CAB Wakes Up**—CAB finally began to overhaul its thinking a few months ago—recognized that a new mass market had been created, and it decided the scheduled airlines should cut in on it.

First evidence of the board's awakening came last month, when it officially recommended that the U.S. trans-Atlantic carriers fight for coach fares at the international Air Transport Assn. rate conference at Nice (BW—Nov. 24 '51, p. 22).

Early this month the board completed its about-face. In an official policy statement, it urged the domestic scheduled carriers to expand coach service "promptly and substantially" and to lower coach fares (it didn't fix any minimum, either).

• **On the Bandwagon**—United was the first to comply, and it went further perhaps than the board had anticipated. United's president, W. A. Patterson, has always been among the staunchest opponents of coach fares. Now, he seems to feel, is the time to get the foolishness over with. So United will pare its fares down to the nonsked level, even to the extent of charging less (\$88) for a New York-San Francisco flight than for the eastbound trip (\$99) because there's more demand eastbound than westbound.

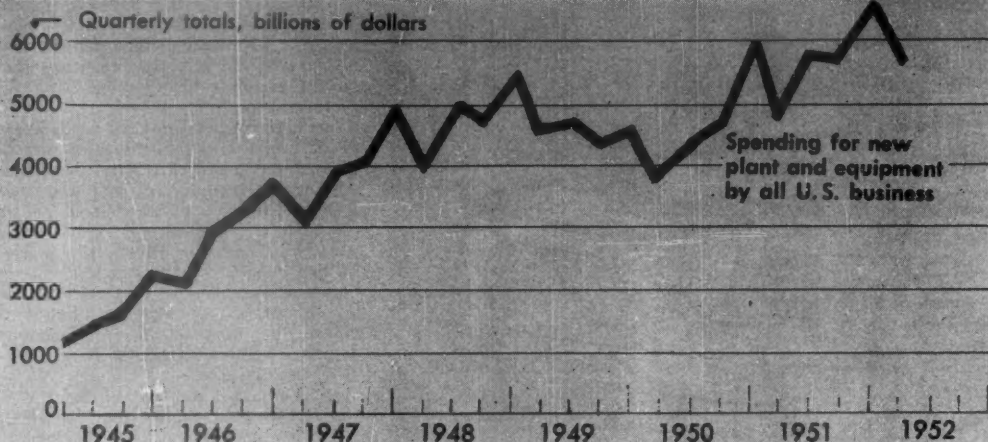
"We will watch the experiment closely," says Patterson, "and eventually either abandon or expand the low-cost service, depending on results."

TWA was the next to join up. It will charge \$99 between New York and Los Angeles (either way); \$32 between New York and Chicago. Two days later American announced its new coach fares, the same as TWA's.

This means that TWA and American fares will be higher than United's on the one run on which they're strictly competitive—New York-Chicago. But United will fly DC-4s; TWA and American, faster, more comfortable Constellations and DC-6s, respectively.

• **Miami Trade**—The New York-Miami run will provide a similar laboratory. National has been offering a nonstop daylight DC-6 coach service for \$58. Now it plans to offer DC-4 coach service, not necessarily nonstop, for \$43 in addition to its de luxe service at \$75.50. Eastern Air Lines, which competes with National on the New York-Miami run, is sticking to the old \$53 coach fare on its DC-4s.

## 1 Plant and Equipment Buying Nears The Ceiling



## 2...After \$50-Billion Expansion in Manufacturing...

(Millions of Dollars)	1945	1946	1947	1948	1949	1950	1951
<b>All manufacturing</b> .....	<b>3,983</b>	<b>6,790</b>	<b>8,703</b>	<b>9,134</b>	<b>7,149</b>	<b>7,491</b>	<b>11,141</b>
<b>Hard goods industries</b> .....	<b>1,590</b>	<b>3,112</b>	<b>3,407</b>	<b>3,483</b>	<b>2,594</b>	<b>3,135</b>	<b>5,213</b>
Primary iron and steel .....	198	500	638	772	596	599	1,310
Primary nonferrous metals .....	54	93	178	193	151	134	312
Fabricated metal products .....	216	356	370	343	271	350	430
Electrical machinery and equipment .....	123	282	304	289	216	245	355
Machinery except electrical .....	316	511	519	527	383	411	638
Motor vehicles and equipment .....	262	591	504	474	349	510	797
Other transportation equipment .....	56	109	95	106	87	82	227
Stone, clay and glass products .....	100	241	326	269	181	280	380
Professional and scientific instruments .....	31	69	67	61	56	72	92
Other hard goods .....	234	360	406	449	304	452	672
<b>Soft goods industries</b> .....	<b>2,393</b>	<b>3,678</b>	<b>5,296</b>	<b>5,651</b>	<b>4,555</b>	<b>4,356</b>	<b>5,928</b>
Food and kindred products .....	337	513	669	721	626	523	631
Beverages .....	97	157	277	332	249	237	299
Tobacco manufacturers .....	6	28	44	56	38	29	54
Textile mill products .....	209	342	510	618	471	450	676
Paper and allied products .....	116	232	371	383	298	327	494
Chemicals and allied products .....	376	800	1,060	941	670	771	1,266
Petroleum and coal products .....	879	1,087	1,736	2,100	1,789	1,587	2,040
Rubber products .....	118	139	143	102	81	102	187
Other soft goods .....	255	380	486	398	333	330	281

Data: Securities & Exchange Commission, Dept. of Commerce.

...But...

## 3...Spending Plans Stay High

Going into 1952, U.S. industry is breaking all records in buying new plants and equipment. And there hasn't been any sign yet that the drive is slackening.

By yearend companies will have paid out roughly \$6.5-billion for new plants and equipment put in place in this quarter. That's an all-time peak on the records put together by the Securities

& Exchange Commission and Dept. of Commerce (chart).

In the first quarter of next year, as plans stand now, companies expect to invest \$5.7-billion. That's off from this quarter's peak—the weather and vagaries of accounting systems always make the first quarter low. If companies can make good on their plans, though, they'll spend 18% more than

in the first quarter of 1951 and far more than in any other first quarter.

• **Near the Top**—But industry's investment in new facilities is probably close to its ceiling. The figures show:

• The only industries whose capital expenditures are rising are those with defense contracts or defense-supporting priorities.

• Controls and materials short-



ages are pulling down spending on non-priority projects. Commercial and miscellaneous businesses, for example, expect to spend about \$1-billion in the first quarter of 1952. In the same quarter of 1951 they spent more than \$1.3-billion.

• **New Figures**—Along with their quarterly checkup, the SEC-Commerce experts broke new ground in releasing detailed figures (table) showing how major manufacturing industries spend for new plants and equipment. In the future the details on manufacturing industries will be published as a part of the regular quarterly surveys.

The experts estimate that manufacturing industries have invested \$50-billion in new facilities since 1945—an amount roughly equal to the book value of their gross capital assets at the end of World War II. This, the greatest wave of expansion in U.S. history, has sharply raised both the quantity and quality of industry's facilities. Although the government experts can't put an exact figure on it, they note that a large proportion of industry's equipment today is less than six years old.

Pacing the field in investing most in relation to their 1945 book value are the chemical, electrical and machinery, and motor vehicle industries. By the same yardstick the rubber and food industries dropped under the average in rates of expansion. And the metal industries—both basic and fabricating companies—had the smallest relative increase.

When measured simply by the size of their annual investment, however, the petroleum, chemical, and steel industries are leading the field. Machinery and motor vehicles among the hard goods industries, and food and textiles in soft goods, come right behind them.

• **Looking Ahead**—Most manufacturing companies plan to keep their expansion going right ahead under forced draft in the early part of 1952. They plan to spend \$3-billion in the first quarter—compared to only \$2.1-billion in the first three months of 1951. In the same way, mining companies, the railroads, other transportation industries, and electric and gas utilities all plan to spend substantially more in the first part of 1952 than they did early this year. Only commercial businesses—which are shackled by restrictions on construction—are dropping behind.

The more work is held down this winter by bad weather, and the more materials allocations force work to be postponed, of course, the higher capital expenditures will be later in 1952.

It all points to more brand-new records—and around-the-clock production schedules in the capital goods industries—next year.

## From Copper to Aluminum

Government people think Anaconda's entrance into aluminum production is symptomatic, the beginning of a trend. The industry—even Anaconda—sees it differently.

Copper is a friendly metal. Some places you just light a fire under an outcropping and out runs pure metal.

Aluminum is just the opposite nowadays; you have to light the fire under politicians, and even then the metal doesn't run for 18 months.

For that—and other—reasons, the great copper producers and fabricators of the world have always been slow to go into aluminum making. Most of them have made wire and other products out of aluminum for years. But producing the metal scared them off.

Anaconda Copper Co., however, has taken the plunge. Last week it got what may turn out to be final government clearance to become a big new producer of aluminum. Mobilization officials ordered Interior Dept. to negotiate with Anaconda and Harvey Machine Co. for power to be generated at Hungry Horse Dam in Montana.

• **Wealthy Partner**—The idea for the \$50-million project at Kalispell, site of the proposed aluminum plant, was originally Harvey's. Harvey wanted to do it alone, but the government wouldn't approve unless he took on a wealthy partner. Logical partner was Anaconda, which was already located in the area. Latest snag in the deal has been an agency feud over power that will be generated at the Hungry Horse Dam near Kalispell. Now it seems that Anaconda will get the go-ahead on the much-needed project.

One of the factors behind Anaconda's decision to go into aluminum at all is a question of long-range raw materials supply—questionable copper vs. sure-thing aluminum. For copper users the same question rises in a different form. Is today's copper pinch merely another short-term crisis, or is it the real thing?

Other copper producers have taken a look at aluminum and backed away. They may change their minds later. For the whole copper industry is being affected by a trend to aluminum that has no foreseeable end.

• **Behind the Story**—Price tells the story. A little over a decade ago aluminum was selling for 20¢ a lb. and copper for 12¢. Today aluminum is selling for 18¢, and copper—on the world market—has soared to 50¢.

Ten years ago the general rule was that aluminum could profitably be substituted for copper, in many uses, at an equal price. But for years copper had been priced at less than two-thirds

of aluminum. As a result, substitution in big tonnages seemed far from likely.

As recently as 1948 the copper industry thought it was safe, pricewise, from competition by aluminum. U.S. producers came to Washington to tell officials that postwar supply had caught up with demand. They sensed a period of falling prices—from the 23¢ that then prevailed.

• **Turned the Tables**—Mobilization reversed that outlook, put a new burden on supply.

The industry knows the story of copper and war. But important industry spokesmen believe they are seeing now merely what they have seen before. Even Anaconda itself feels that in two or three years there will be more copper available than anybody can use. For this reason, Anaconda thinks there is little justification for the pressure the government put on the firm to urge it into the Kalispell deal.

• **Same Old Story?**—Copper men don't argue this mainly from the supply side. They argue that when mobilization demand tapers off it will be the old story for copper—more of it in peace than producers know what to do with.

Metal experts in mobilization agencies don't agree. They think military demand will remain sufficiently high to keep copper short from now on, unless the world is thrown into outright depression.

• **Chary**—Copper producers are keeping a wary eye on what is happening under mobilization. In the third quarter Defense Electric Power Administration, claimant agent for electric utilities, had trouble getting rid of 3.2-million lb. of covered aluminum wire. In the first quarter of next year, it expects to allot 6-million lb. of this wire and to have a waiting list when that is gone.

In the first quarter aluminum may take the place of copper wire for about 15% of such jobs as pole-to-house connections. In the second quarter the substitution figure could be 25%.

Defense Production Administration experts estimate that 10% of the electric conductor and 20% of nonconductor copper used by the electric industry could be copper.

If mobilization demands let up, this pressure to substitute will not be so great. But it will be there—government experts predict—spelled out in price rather than in today's controlled materials orders.



**TOP OFFICIALS** President Truman and Attorney General McGrath were still inclined to poohpooh the charges made before the King subcommittee. However, they were also talking about the need to stage a housecleaning.



**UNDERLINGS** James P. Finnegan, tax collector in St. Louis, was indicted and . . .



. . . T. Lamar Caudle, Assistant Attorney General in charge of the tax division, was fired for his involvement with tax offenders.

## I. Truman Must Clean Slate for November

President Truman, at midweek, was having a tough time swallowing the bitter medicine prescribed for purging his administration of corruption.

He had selected as his doctor Federal Judge Thomas F. Murphy, the man who sent Alger Hiss to jail and then waded into New York's police scandal. Truman's delay in making a formal announcement was laid to his reluctance to grasp a painful nettle and his difficulty in getting the housecleaners off to a good start.

The object is clear, though: to do whatever is needed to make the average voter next November feel that the Administration has cleaned itself up—but good.

This is a big job, even for a big man like Murphy. He's got to give a thorough weeding-out to Bureau of Internal Revenue and other agencies. He's got to deodorize the atmosphere that drifted from the hearings held by Rep. Cecil King's House Ways &

Means subcommittee. The "BIR mess" involves officials indicted for taking bribes or fired for going along with influence peddlers, for accepting gifts and favors from people in trouble with the law, for being pally with criminals.

• **Shakedown Story**—Murphy will have to look into the sensational charges that a handful of key officials were in a "shakedown ring" organized to pocket bribes from tax evaders in return for settling their cases considerably short of the maximum penalty.

This charge comes from Abraham Teitelbaum, one-time lawyer for Al Capone and now a man of means and property in Chicago. He claimed that Frank Nathan, a convicted tax cheat from Pittsburgh who specializes in "deals," offered to arrange a settlement of Teitelbaum's tax troubles for \$500,000. This sum was to keep Teitelbaum from going to jail.

• **Charge and Effect**—Nathan said he was acting for a group that included

Charles Oliphant, BIR chief counsel; T. Lamar Caudle, chief tax prosecutor for Justice Dept.; George Schoeneman, ex-commissioner of BIR; Jess Larson, head of the General Services Administration (opposite page), and Joseph Numan, who was Schoeneman's predecessor.

All persons named by Teitelbaum declared his shakedown story was a fantastic lie.

Oliphant, Caudle, and Larson said so on the King committee witness stand. But the inquiry did show up Caudle and Oliphant as men of poor judgment, in both their official activities and their social life. Caudle was fired, and Oliphant resigned.

**The record on Caudle shows:** He took a \$5,000 fee for arranging the sale of an airplane to an oil man involved in tax troubles.

Caudle also yielded information on a big tax case to Rep. Frank Boykin of Alabama to the point where Peyton

Ford, deputy attorney general, took the case completely out of Caudle's hands. Caudle admits getting cut prices on a mink coat, automobiles, television sets, and other things.

Most of the "favors" could be traced to people who faced big government suits for not paying up their taxes. The amounts involved ran to hundreds of thousands of dollars.

**The record on Oliphant shows:** He held up the tax-fraud prosecution of two Washington (D. C.) meat packers until the statute of limitations ran out. He did so, he said, at the request of Rep. James H. Morrison, Louisiana Democrat.

Oliphant also admits he delayed Teitelbaum's tax case at the request of Henry W. Grunewald, Washington "investigator" who is himself behind on his taxes. Oliphant, it turned out, owed \$1,300 to Grunewald.

• **Coast to Coast**—Not all the BIR scandal turned up in Washington, though. There was plenty to spread all across the country. The record shows that already:

• Three collectors of internal revenue out of 64 around the country have been indicted for taking bribes: Denis W. Delaney of Boston, James P. Finnegan of St. Louis, and James G. Smyth of San Francisco.

• Deputy Collectors Paul V. Boyle and John J. Boland of San Francisco and Andrew J. Kelly of Brooklyn have been indicted.

• Three other collectors either have been fired or have resigned: Joseph P. Marcelle of Brooklyn, Lipe Henslee of Nashville, and James W. Johnson of the third district of New York.

More than 50 additional bureau employees have been either fired or forced to resign since BIR's "new broom" boss, John B. Dunlap, became commissioner on Aug. 1. Still others are on the suspension list until their cases are cleared up.

• **Up to Truman**—Truman's dilemma in all this is a thorny one. Fast, firm, and final action on the scandal must be forthcoming. Otherwise, the tax mess may be the straw that breaks the Democratic record after five straight Presidential victories at the polls. But the kind of clean-up necessary to remove scandal as an issue next November can hardly leave untouched such Presidential aides as Gen. Harry Vaughan; Secretary of the Treasury John Snyder, who is responsible for BIR; Attorney General McGrath, who still backs Caudle, even though the President fired him without bothering to inform McGrath; and even Supreme Court Justice Tom Clark, who, as Attorney General, accompanied Caudle on some of the free vacation trips South.



**BUREAUCRAT AT BAY** Jess Larson, GSA head, finds himself in the midst of the mess. It's a good example of . . .

## II. How an Official Gets in a Jam

The men who are fired, or who resign, or who are indicted aren't the only ones affected by all this washing of dirty linen. The repercussions strike nearly every federal administrator who works in the area of government purchases or loans or favors. Take the case of Jess Larson:

Until three weeks ago no one in Washington questioned Larson's fitness for two big jobs—one as head of General Services Administration, the other as head of Defense Materials Procurement Agency.

A little man named Frank Nathan changed that.

Suddenly Jess Larson's comings and goings, his hotel accommodations, his long-distance telephone conversations, his contacts with people outside office hours, his very reputation as an honest man—all are under scrutiny.

Larson may be cleared of wrongdoing. He may not be. Either way, his case illustrates how hard it is for a federal official to stay clear of the influence peddlers, the shadowy men who live by the easy buck.

• **Two Strikes**—Larson's name crops up twice in the finger-pointing. Each time he is linked with Frank Nathan, a self-styled maker of deals:

• In the Teitelbaum tax shake-down hearing, he was mentioned as one of a clique seeking "soft touches." Nathan was the man who used his name.

• More serious in Larson's eyes is a rumor that hasn't yet reached an open hearing. It links Larson with a \$35,000 fee allegedly taken by Nathan for landing a contract with War Assets Administration, then headed by Larson. There is gossip that the money was to be held for Larson.

This second angle has led Larson to request a public inquiry by the permanent investigating subcommittee of the Senate Expenditures Committee. He's ready to stand or fall on the issue of his honesty.

• **Vulnerable**—Larson is typical of officials who may be spattered by the mud thrown in the current scandal investigations. His vulnerability is greater than most, though.

As head of GSA, Larson supervises 55,000 purchase contracts a year, involving \$100-million; 2,500 contracts for upkeep of public buildings, totaling \$17-million a year; 12,000 authorizations to lease; \$190-million worth of mortgages taken by War Assets as security on the sale of property to

private business. His dealings as government purchasing agent and housekeeper plop him into the natural habitat of the fixer and influence man.

As head of DMPA, Larson operates on a worldwide scale, buying for the materials stockpile, making contracts behind closed doors with all sorts of mining and commercial interests.

- **Clean Slate**—Larson got these jobs with four resounding votes of confidence from the Senate. In his rise through War Assets administrator and Federal Works administrator to his present posts, he had only two Senate votes ever cast against him. Both were in disagreement with the way he had disposed of a government plant in Salt Lake City—he had sold it to a small company. The American Potash Co., represented by the law firm of Joseph E. Davies, also wanted to buy the plant.

Davies' son-in-law, Sen. Millard Tydings, opposed Larson's confirmation and, on a voice vote, apparently got support from one other senator.

Larson's reputation as an administrator took shape in his War Assets days. But his present troubles began then, too. Frank Nathan reportedly helped the Landuland Land Corp. in 1948 get a contract with War Assets to dismantle an aluminum plant operated during the war by Alcoa at Torrance, Calif.

Since then, Nathan has popped up in Larson's life in many ways, despite rebuffs.

- **How to Steer Clear**—If you're in public office and you don't want to do business with a Frank Nathan, here's what you can do about it:

- You can refuse to talk with him by phone. Larson says his secretaries have stopped 30 calls recently from Nathan, and another 30 have been stopped at his home.

- When he does manage to get you on the phone, you can dress him down. Larson was in a barber chair in a Salt Lake City hotel when he was called to the phone. It was Nathan, calling from the New York office of a friend who wanted to lease a building to GSA. Larson blasted him.

- When you find yourself in the same hotel with him, you can move. Larson says he did this in Pittsburgh, moving to the Duquesne Club.

- When he tries to buy into a personal business venture, you can say no. When Nathan wanted in on an Oklahoma oil deal with Larson and his brother, Larson turned him down.

- You can use a counterattack. Larson says GSA records don't show Nathan as a principal in the Landuland Land contract. If he can show Nathan did collect a fee, he may sue to recover the sum from the corporation on the grounds the contract required the cor-

poration to list names of all principals.

- **Tactics of a Nathan**—On the other hand, if you're a Frank Nathan and want to keep in touch with a top government man, here's what you can do:

- Place long-distance calls to your man when he's traveling, not guarded by secretaries. The King committee has hotel records listing such calls from Nathan to Larson.

- Buy into the same business ventures that your man is in. Larson put \$3,000 into an oil deal. Among 85 others in the venture were T. Lamar Caudle, fired as Assistant Attorney General—and Nathan.

- Show up on platforms where your man is speaking. Nathan did this when Larson dedicated a hospital in Miami Beach.

- Be around to do favors. Nathan supplied Larson with a room at the Waldorf-Astoria when rooms were hard to get. Accepting the room, Larson admits, was a mistake.

In the Larson-Nathan case, Nathan got something short of a complete brushoff, and Larson knows it. His failure to shove Nathan entirely out of his affairs comes back to haunt Larson in rumor-ridden Washington.

As Larson sees it now, the one thing he didn't do was "kick the guy in the face." And that, Larson adds, is something you just can't do when you hold public office. Politics being what they are, nobody gets kicked in the face. And that's why the influence racket is going to live longer than today's reform wave.

## Steel Price Increase? Maybe

Economic Stabilizer Putnam thinks an increase, justified by the Capehart Amendment, would be a good way out of wage-increase problems. OPS isn't sure it'll work.

The steel wage hassle—which Economic Stabilizer Putnam tossed into the lap of price boss DiSalle this week—is being tossed right back where it came from.

Putnam had figured that granting the industry price increases to cover higher wages—but doing it in the name of the Capehart Amendment—would have been a perfect face-saver for harassed Administration officials. It would make the steel men and the union happy, and—for a while at least—it would preserve some semblance of stabilization. But the fact seems to be that the Capehart Amendment just isn't flexible enough.

No one will know for sure about this for some time yet. A lot of paper work still has to be done before anything like precise figures can be worked out. Tentative calculations by OPS experts, however, indicate that the Capehart Amendment doesn't entitle steel to much of a price increase—if any at all.

- **Information Please**—OPS was first dragged into the picture last week at a meeting in Putnam's office.

Industry executives, including Big Steel's Ben Fairless, had come in to ask just what their prospects were. They were worried about the increase in wages and its effect on profits. They wanted to know what the Capehart Amendment would do for them. Putnam wasn't sure, so he sent them over to DiSalle.

As a result, several meetings between OPS and the industry have already taken place. Efforts so far have been confined to translating the brief, general language of the Defense Produc-

tion Act into the specific operating and accounting realities of the steelmaking industry.

The law, for example, says that cost increases through July 26, 1951, can be added to base period prices. But that doesn't mean the cost of cleaning a furnace that happened to be down during that base period should automatically be reckoned in. Some method of spreading costs such as these must be worked out.

- **Ceiling Coming**—When this phase is finished, OPS will rush out a special ceiling price regulation. The new order will replace the voluntary agreement under which steel is now operating—an agreement not to raise prices without 20 days' notice to OPS.

Once this order is issued, steel company accountants can get down to actual figures. After that, their arithmetic will go to OPS for review.

In effect, the accountants will be stacking last December's wage hike and a host of other cost increases against declining unit overhead costs resulting from increased volume and the \$5-a-ton price boost that followed the wage increase.

From a rough survey of the industry's earnings, OPS expects cost and income increases to balance.

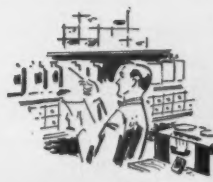
- **Passing the Buck**—So now it's up to Putnam again. Any price increase he gives to steel will be a clear break in the price line DiSalle has been hoping to keep. The inflationary effects of such an increase, as the impact spreads through the economy, seem certain to exceed those of the Capehart Amendment.



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## BUSINESS BRIEFS

**Another atomic engine** for aircraft is on the boards. The Air Force revealed a multimillion-dollar contract with Pratt & Whitney of East Hartford, Conn. It's wholly separate from the General Electric project announced earlier in the year. Curious coincidence: National security ceased to demand a top-secret classification on the P&W project just in time for the annual Wright Brothers dinner in Washington.

**Electronic brains** are getting smarter (BW-Dec.15'51,p94). M.I.T. announced a new computer that can do 20,000 calculations a second—a new record. . . . UNESCO is setting up a world center in Rome for electronic computing. It will use a machine capable of 1,000 to 2,000 multiplications a second.

**Oklahoma City voters** last week approved a \$6.5-million bond issue to buy the right of way for a 50-mi. expressway ringing the city (BW-Dec.8'51,p140).

**Light-car trend:** Sears, Roebuck put its Allstate sedans on sale this week in 19 southern and western cities. Except for changes in the grille and a little longer bumper-to-bumper dimension, the Allstate is the Kaiser-Fraser Henry J. A 4-cyl. sedan sells at the factory for \$1,395; a 6-cyl. with overdrive for \$1,796. . . . Hudson will offer a new light car next summer at less than \$2,000. . . . OPS has fixed retail prices for Willys' new Aero wing line: from \$1,718 to \$1,984. f.o.b. Toledo and plus taxes. The Aero sedan will make its bow after the holidays (BW-Dec.8'51,p28).

**Auto license plates** will have to do for two years at a clip, says National Production Authority. Twenty-one states are using 1951 plates in 1952; the rest will issue plates in '52 for two years.

**Sale of the Empire State Building** by the John J. Raskob estate for close to \$50-million (BW-Jun.2'51,p120) lacked only final closing at midweek. The buyers: a syndicate headed by Detroiters Roger Stevens and Alfred Glancy, Jr., and Ben Tobin of Hollywood Beach, Fla., and including Robert Young's Alleghany Corp., American Securities Corp., Chas. S. Noyes Co., and Hilton Hotelman Henry Crown. Main financing source: Prudential Insurance Co., which is buying the land under the New York skyscraper from the syndicate for \$17-million, leasing it for 99 years. Pru will lend another \$15.5-million on a building mortgage.

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## LABOR



NEGOTIATORS John Stephens (center), representing Big Steel, and Philip Murray (left) and David McDonald, representing USW, maintain the formalities, but . . .

## Steel Demands Point to Strike

**Steelworkers lay their wage demands on the table—19¢ an hour plus fringes. And they vote to walk out Jan. 1, regardless of government, unless agreement is reached.**

CIO's steel union planked its bargaining cards on the table this week. It demanded a wage increase averaging 19¢ or 20¢ per hour, plus fringes, as the basis for its 1952 contract. And it laid plans for a walkout—regardless of what the government does—if a settlement isn't reached before basic steel contracts expire Jan. 1.

The 170-man wage policy committee of the United Steelworkers of America announced in Pittsburgh that a strike is "unavoidable" unless a new contract is agreed on.

• **The Punch Line**—That much was expected from the committee summoned to Pittsburgh by USW's president, Philip Murray. But what came afterward caught government and industry flatfooted.

Everybody thought the union would threaten a strike, then defer to government appeals to continue working while the Wage Stabilization Board considered the issues in the steel dispute. Instead, the union put real teeth into its strike threat. It barred acceptance of any government truce plan until a special union convention can

determine "the future course of the union in this dispute."

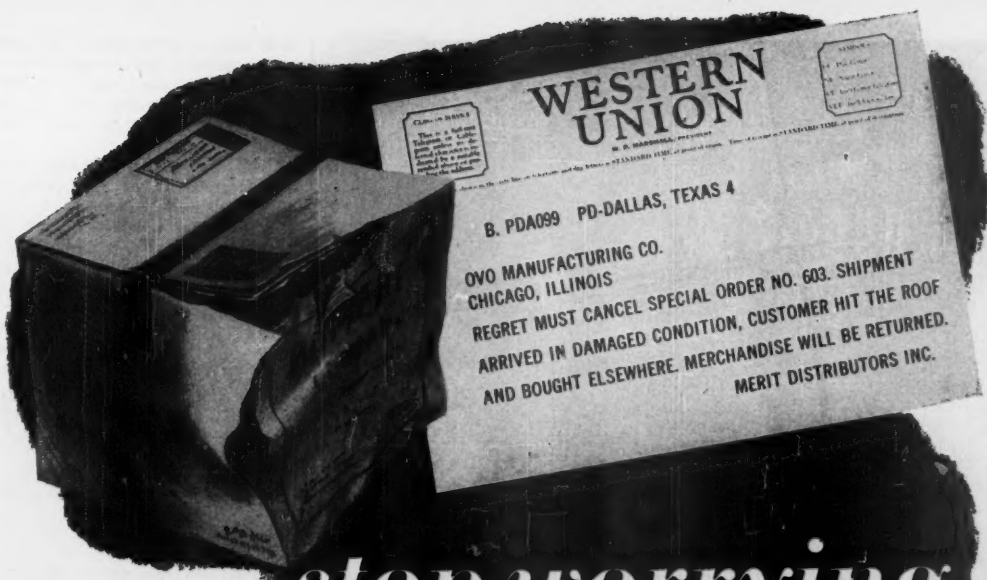
• **Strike for Sure**—The convention will be held Jan. 3, probably in Atlantic City, with some 3,000 delegates present. Until they can "consider the facts as they then exist," according to Murray, mills will be shut down.

This virtually assures a week-long strike, at least.

• **Brass Tacks**—To speed things along, the USW wage policy committee set union demands down in black on white for the first time. It announced that the "substantial" pay hike it wants figures out to a general 15¢ hourly wage increase. In addition, the union wants a half-cent increase in differentials between the 32 steel job classifications. That would raise the differential between each job and the one above it from the present 5¢ to 5½¢. And since these half-cents would accumulate as you went up the job scale, the man in the top bracket would get a hike of 15½¢ in addition to his straight-time increase.

Last year the union got a flat 12½¢ hourly hike in pay, plus a similar half-





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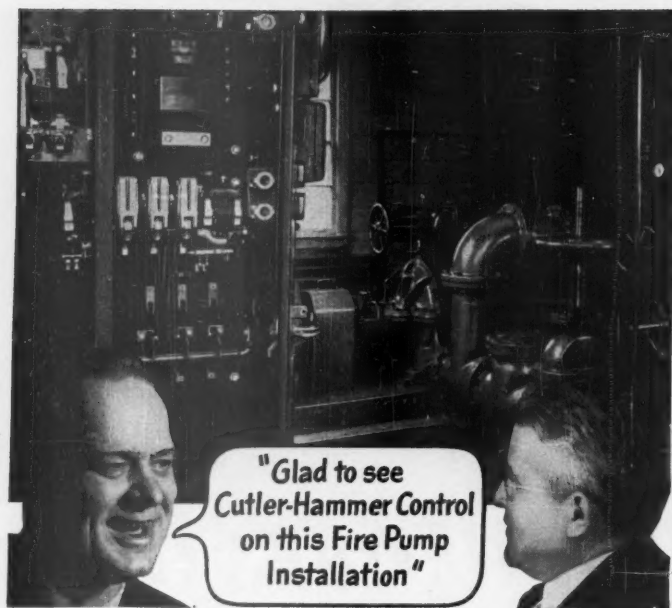


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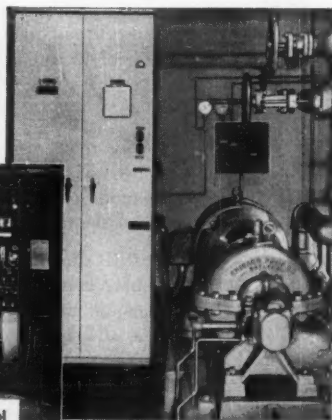
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Cutler-Hammer equipped fire pump in a large Texas office building.

cent raise in differentials. The average raise, counting both straight time and differentials, turned out to be 16¢ an hour. Figured on that basis, this year's demand would average 19¢ or 20¢ per hour.

• **Also . . .**—Other demands revealed or confirmed by the wage policy committee include:

**Eight paid holidays** a year. Since steelworkers don't take holidays off, this would mean eight days of premium pay for most of them.

**One week's paid vacation** after one year; two weeks after two years; three weeks after five years; and four weeks after 15 years. The vacation schedule now provides one week's vacation after one year, two weeks after five years, and three weeks after 25 years.

**Elimination of geographic differentials.** Murray estimates this would cost U.S. Steel—the principal company affected—less than 1¢ per hour per man.

**Elimination of all rate inequities.** Murray says this would cost only an "infinitesimal" amount.

**Overtime** for Saturday and Sunday work, as such.

**A guaranteed annual wage.** USW this week gave details of what it wants and what it says is "inevitable" in the steel industry: a guarantee of 32 hours' work per week for 52 weeks for all employees with more than three years of continuous service.

**A new incentive plan.** The present "fair day's work" plan, says USW, is "a most diabolical piece of business." The union is currently watching with interest Jones & Laughlin's new "equipment utilization" plan (BW—Nov. 10/51, p26).

Other noneconomic demands remain unchanged (BW—Dec. 15/51, p32).

• **Who'll Pay?**—The steel industry claims that USW's "excessive" demands would add about \$10-million per hour to labor costs—an amount that would have to be offset through increased steel prices. The union figures its demands would cost less than half what industry says and claims that the added cost could be met from the industry's profits.

No matter what the cost, the government insists it will have to come from the industry's own funds. No higher prices will be allowed to offset added labor costs in 1952, Economic Stabilizer Roger Putnam told steel men (page 26). But a Capehart Amendment adjustment covering higher costs through July 26, 1951, will be permitted, if warranted.

• **Washington's Stand**—Defense mobilizer Charles Wilson added emphasis to Putnam's warning. He announced that the government will fight any union effort to break its wage-control formula even if it means strikes.



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PX-404	DiButyl Sebacate
PX-408	DilsoOctyl Sebacate
PX-658	TetraHydroFurfuryl Oleate
PX-917	TriCresyl Phosphate

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CIO MEMBERS of WSB—Joseph Bieme, Emil Rieve, John Livingston—want productivity raises to be considered first as . . .

## Fringe Benefits Crowd WSB Agenda

The typhoon blowing up over steel wages is the No. 1 worry for the Wage Stabilization Board these days. But the board has plenty of other skull-crackers waiting their turn on the agenda. Top among them are pension plans, substandard wages, and productivity raises.

• **Quick Ruling**—Most of these problems will have to wait until the steel crisis is settled, but one is likely to get attention before that. A WSB decision on new pension plans, and revisions in old ones, is due any day.

After weeks of sometimes stormy debate, the board decided last week-end to recommend to Economic Stabilizer Putnam the virtual decontrol of health and welfare plans. WSB proposed that employers be allowed to adopt new welfare plans, or alter old ones, without charging the cost against the wage increase permissible under WSB "catch-up" and living-cost raise formulas.

The board wouldn't let welfare plans run sky high under its proposed new policy. Limits, based on benefits rather than costs, would be imposed.

Once WSB gets the pension question out of the way, it hopes to get down to an accumulation of other matters. Many go far beyond the basic question of how far hourly pay will be allowed to rise. WSB authority extends to these outskirts because, directly or indirectly, they may mean more money for workers.

Unions wish WSB could keep hands off all side issues such as severance pay, a shorter work week, or fringe benefits. Both AFL and CIO say these are matters for collective bargaining. But the issues are clearly in the province

of the board, which will have to impose controls or decide to do without them.

• **Agenda**—Last week the board's CIO members—Emil Rieve of the textile workers, Joseph Bieme of the communications workers, and John Livingston of the auto workers—listed in order the things they believe WSB should consider.

Top spots went to productivity raises, severance pay, and substandard wages, in that order. These also came high on a tentative agenda drafted by public members of the board.

Here's the public members' list—which WSB will more probably follow—in approximate order:

**Commission earnings.** WSB has jurisdiction over unionized salesmen—milk and bakery driver-salesmen, insurance salesmen, and other route men working either wholly or partially on commissions. A study committee, set up by the board to recommend policy on the special problems involved, recently turned in a divided report (BW—Dec.15'51,p36). The split delayed WSB's final decision.

**Substandards.** During World War II the old War Labor Board let anyone raise "substandard" pay first to 40¢ an hour and later to 55¢ without prior approval. Now unions want WSB to recognize all rates below \$1.25 an hour as substandard and to permit automatic rises to that level. The board recently approved raising farm labor wages to 95¢ to correct substandards; it hasn't got down to a policy decision on industrial workers.

There's a complication to this. When correction of a substandard is permitted, raises can't be confined to workers who get less than the specified amount.

The pay of those who get more than the "standard" must be adjusted up to preserve differentials.

**Productivity raises.** WSB already has approved existing 4¢-an-hour "annual improvement factor" clauses in auto industry contracts. It feels that it can't deny a similar raise for other workers. CIO agrees, but wants the board to relax some of the rigid controls it now exercises over allowable productivity increases.

AFL members of the board take a different approach. They think all workers, regardless of the state of their own industry, should be compensated en masse for increased efficiency in American industry as a whole (BW—Nov.24'51,p30).

**Wages in new plants.** WSB Reg. 9, covering wages in new plants, was issued by former administrator Eric Johnston early this year while WSB was inoperative because of the walkout by labor members. The regulation requires wages in new plants to conform to those in the same industry in the area. There's now a question—being pressed by CIO members—whether a choice between industry or area rates should be allowed. This is already the board policy for corrections in interplant inequities, or for making "fringe" adjustments.

**Small employer exemptions.** During the war WLB exempted employers who had no more than eight workers from wage controls. Many exceptions were made, however, as in tool-and-die shops and for other small employers who bargain through associations. WSB must again set policy on small employers. CIO wants to exempt all who employ fewer than 10 persons.

**Severance pay.** Many unions—includ-



ing CIO's steelworkers—are going after dismissal pay in current bargaining. WSB must decide what to do about any future severance agreements. WLB had no policy on the subject, although in basic steel near the end of World War II it approved dismissal pay for steelworkers displaced through technological changes.

**Price exempt industries.** A committee has recommended that WSB keep authority over wages in industries—such as public utilities and railroads—where the “prices” are regulated by the government. It also recommended that WSB keep jurisdiction in other industries exempt from price controls where lifting of wage curbs would have “contagious” effects. CIO wants a complete wage exemption for all price-exempt industries.

**“Fringe” benefits.** These are now covered by WSB Reg. 13, which requires specific approval for improvements in paid holiday, vacation, shift bonus, and overtime agreements—to bring them into line with industry or area practices. WSB is thinking about making this regulation self-administering; employers would be permitted to conform with area or industry patterns without prior approval.

CIO wants the board to go even further. It would permit employers to improve fringe benefits up to some national standard—such as six paid holidays a year, two-week vacations after five years, and so forth.

**Shorter work week.** Many unions are going after a shorter work week without any reduction in straight-time pay. In the CIO maritime case, WSB ruled that it wasn't a pay increase to begin overtime after 40 hours a week instead of 48 hours. That's the closest WSB has come so far to a policy on shortening the work week. The wage-and-hour law requires time and a half over 40 hours in industries in interstate commerce—but permits voluntary agreements to start overtime earlier than that.

CIO wants the board to O.K. any negotiated agreement for a shorter week and to approve 40 hours as the straight-time week for all industries—including those not covered by the wage-and-hour act. This would benefit, particularly, workers in department stores (among whom CIO is now conducting an organizing drive) and transit workers.

**• Other Matters**—CIO's list stops with those major items. The public members list a few more. They want to take up questions of applying cost-of-living increases to the trucking industry; new bonus and profit-sharing plans; criteria to be used in shifting from single or random rates to rate ranges; and use of hourly rates instead of average straight-time hourly earnings in computing the board's 10% “catch-up” allowance.



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LANDSCAPES by maintenance painter James Metallo, who doubles in oils and magic.

## To Retire Happily, Get a Hobby First

**Pitney-Bowes and Lockheed hope to ease the abrupt shift to inactive life, by encouraging outside interests.**

Develop a hobby early, and chances are you'll get a lot more enjoyment from retiring at 65. That's the advice the experts are giving these days. And it is the theory that a number of companies are following in setting up preretirement programs for their employees.

Employees who attended a Pitney-Bowes hobby show in Stamford, Conn., recently weren't thinking of retirement. For most of the plant and office workers, age 65 was still far off. But wittingly or not, they were going through one stage of P-B's preparation-for-retire-

ment program. They were being encouraged to devote more time to outside activities.

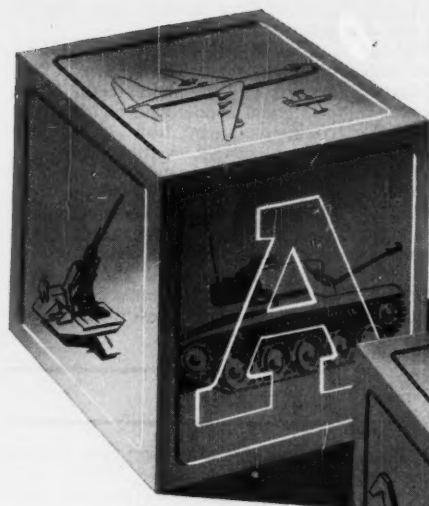
• **Long-Range**—Similarly, when Lockheed Aircraft set up a new preretirement service, it chose as retirement counsellor Ray H. Geist—who had a lot of experience in developing hobbies and outside interests. Lockheed—which also plans to appoint financial and medical advisers—wants Geist to help employees get started with long-range retirement plans.

Other companies, notably Esso Standard in New Jersey, are increasing

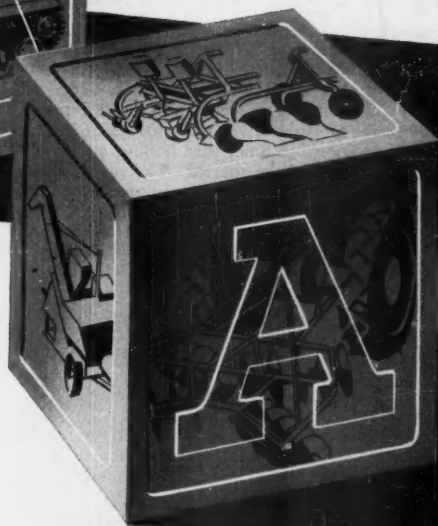
the emphasis on hobbies in preretirement programs (BW—Apr. 14 '51, p. 32). They are all convinced that a man with something to do can quit work and still be happy. But they've found that the hobby must be developed early in life; it's too late to start when a man is ready to retire.

Joseph J. Morrow, P-B's director of personnel relations, sees preretirement advantages, too. He says that a hobby helps ease everyday tensions at any time—and "keeps a person happy and interesting to himself and others."

P-B's hobby-development program is really aimed at the time a man retires, though. Then, says Morrow, outside interests "make all the difference in the world. Doctors, psychiatrists, and per-



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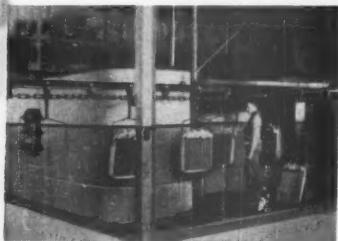
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sonnel experts all agree that a man with a hobby finds retirement one of the happiest times of his life." Without one, he's likely to be "miserable with nothing to do." And, adds Morrow, "the chances are that he will die soon." Literally bored to death, although medical records might list some other cause.

• **Keep Busy**—Pitney-Bowes' retirement counseling program got under way in 1948. At first, advisers stressed financial and economic planning. They urged workers to find something to keep them busy—a part-time job, handyman work, or a hobby.

Later P-B found that workers approaching 65 couldn't easily be interested in new hobbies. So the company set up its hobby program—aimed at fostering hobbies and outside interests as early in employees' work lives as possible. Since then hobbies and handicrafts have spurred. The recent show, held with the cooperation of the Employees Assn., was "the best yet, from standpoint of number of entries and interest shown," according to P-B.

• **Retirement Education**—Meanwhile, St. Louis University and Associated Retailers of St. Louis, an employer group, are completing plans for an educational program designed to ease retirement problems of those retiring from department store and other retailing jobs.

Personnel directors of the ARSL firms will take a six-week course, beginning early in January, on the special problems of the aged. After that they will go through a six-week "happy retirement" program set up by the university. Idea is to familiarize them with the program and to find any flaws in it before it's offered later in the year to employees about to retire from ARSL store jobs.

## Foremen Are Getting Pay Raises, Too

What happened to foremen's wages while production workers' pay was rising to new high levels? Associated Industries of Cleveland recently asked 106 member companies. They reported that supervisory wages were going up, too, and just about as fast.

Since 1949, when AIC last surveyed foremen's wages, average pay of supervisory employees in Cleveland has advanced 11.6%. That's just a little less, AIC found, than production workers' wages had risen under federal wage controls up to the time of its survey.

Specifically, AIC found that:

Class A foremen (superintendents) and other highest-ranking supervisors) averaged \$540.31 a month in mid-1951—a 10.6% increase over 1949. They average 79 men under them.

None of them punches a time clock or gets overtime pay.

Class B foremen averaged \$483.84, or 11.3% more than in 1949. They average 38 men under them. Some, paid on an hourly basis, punch a time clock on the same basis as production workers and get overtime allowances. Others, on a straight salary, get no overtime.

Class C foremen (the lowest level) averaged \$371.22, up 13.4% from 1949—about the same percentage raise as production workers. They supervise an average of 22 persons. Paid on an hourly basis, they punch the time clock and get overtime pay.

## LABOR BRIEFS

**Written reports** on raises given without prior approval under WSB's 10% "catchup" and c-of-l formulas need not be filed with the board in the future. Employers are now required only to keep records of the raises available for inspection by "appropriate" agencies.

**Textile wage talks** will be held in New York Jan. 5 by CIO representatives of 110,000 northern cotton-rayon workers. The question before them will be: Should a raise be sought in March despite the industry's present spotty business?

**The 17th walkout** since work began last spring halted construction on a new atomic energy powerplant at Jopka, Ill. About 2,500 workers from 13 AFL unions left jobs to protest layoffs.

**Plant gamblers** have been warned by United Auto Workers (CIO) that it will not, in the future, process grievances for anyone disciplined or discharged for engaging in organized rackets or gambling, if guilt has been clearly established. Statement is a follow-up on CIO's "ethical practices" stand (BW—Nov.17'51,p26).

**Coal wage hike** will be forthcoming next Apr. 1, according to Cleveland reports. Word is that informal talks have been held, with operators "more or less resigned" to upping pay to equal—or top—what USW gets. One factor is said to be the operators' fear of losing younger skilled miners to other industries.

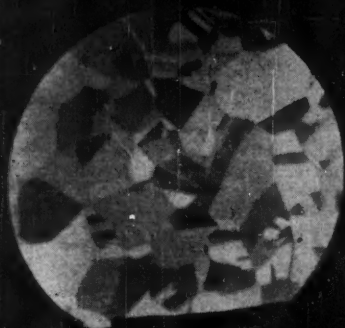
**Paraplegics factory**, built without cost for handicapped veterans by Chicago unions (BW—Sep.22'51,p40), is now in full operation on war orders. Run by the veterans' firm, Paraplegics Mfg. Co., the plant now employs 50 handicapped veterans.





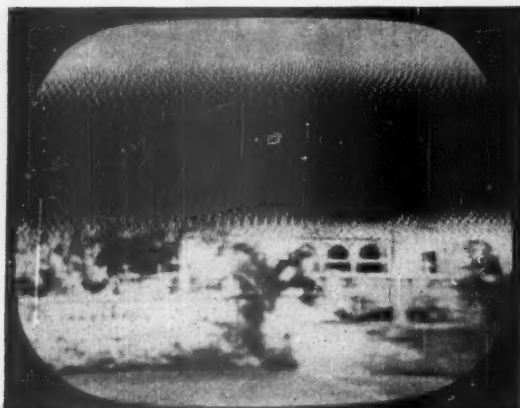
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# PRODUCTION



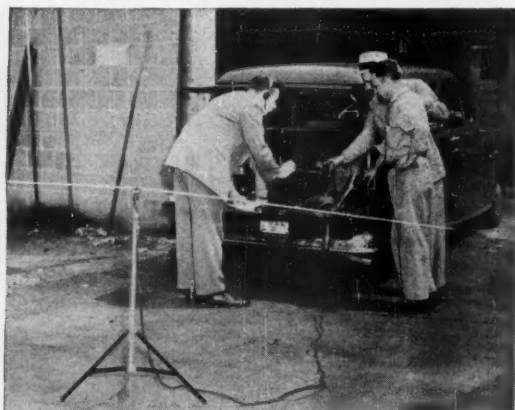
**BAND** Mild interference from a diathermy machine makes a dark band across the picture. If stronger, it blankets the picture.



**STRIPES** A pin-striped or herringbone pattern comes from an industrial heater, a short-wave transmitter, or a nearby TV set.



**REVERSE** A picture goes negative when the interference is stronger than the picture signal.



**TEST** Measuring equipment helped Remington Rand track down a case of TV interference around one of its plants.

## Wayward Ripples Hog the Wavelengths

A Coast Guard station on the West Coast recently had its aviation radio channel jammed by strong, consistent interference.

The Federal Communications Commission went on the trail of the interference and finally traced it all the way across the country—to a small plastics plant near New York City.

The offender in the plant was a radio-frequency heating unit—a small but powerful transmitter whose radio waves are used as a source of heat. The plant was using it to preheat a plastic before molding in a press. (In the metal-working industry, companies use the

same type of unit to preheat metal parts.)

• **Minds of Their Own**—The trouble with R-F heating units, such as the one that brought FCC down on the plastics plant, is that they tend to get out of line. Under present regulations, an R-F heater is supposed to operate within a special band of wavelengths set aside for industrial equipment. Furthermore, it's not supposed to radiate (or broadcast) spurious radio signals—aside from the one for which it was designed—stronger than a certain level prescribed by FCC.

But a heating unit is a kind of radio

transmitter that isn't easy to regulate. It's the nature of the beast to operate outside of its band and to broadcast a variety of radio signals instead of only one. So—unknown to the owners—a lot of this heating equipment has been causing interference.

• **Many Culprits**—This kind of interference from industry equipment is old stuff to the FCC. It crops up every week throughout the U.S. But it may be news to you—and discomfiting news, too, if the FCC puts its finger on your equipment some day. Industry isn't the only offender, of course. Other types of electrical ap-



# PROGRESS AGAINST PNEUMONIA

One of the major achievements of medical science is the progress that it has made against pneumonia. A recent study shows, for example, that for every person who now succumbs to pneumonia, three or four were claimed by it as recently as 15 years ago. This gain has been made possible by improved methods of treatment—including increasingly effective medicines.

Yet, pneumonia is still an important disease—especially among infants and elderly people. It takes an annual toll of about 50,000 lives. Doctors say that this toll could be reduced if the skills of medical science were used *promptly*—at the first signs of pneumonia. This is because the new antibiotic drugs work best when given in the early stages of this disease. So, during the winter everyone should be alert to these warning symptoms of pneumonia:

1. A severe, shaking chill followed by fever.

2. Coughing accompanied by sharp pains in the chest.

3. The appearance of rust-colored sputum.

4. Difficult or labored breathing.

Certain types of pneumonia may occur without these symptoms. However, if they do appear, call a doctor promptly, go to bed, and remain quiet.

Remember, too, that a neglected cold—particularly if accompanied by fever only a degree or so above normal—may be a forerunner of pneumonia. Even if fever does not occur, it is always wise to take care of a cold, especially one that “hangs on.” Stay home and rest if you can, eat lightly, and drink plenty of fruit juices and other liquids.

While medical science can assure recovery from respiratory infections in a vast majority of cases, *prevention* is still largely

up to *you*. To guard against pneumonia—as well as colds, influenza, and other respiratory conditions—the following precautions are advisable:

**Try to build up your resistance:** get plenty of sleep, avoid excessive fatigue, and eat a well-balanced diet.

**Dress warmly when going out,** especially during cold, damp weather.

**Keep away from people who cough or sneeze carelessly.**

The wisest precaution of all, however, is to keep in the best possible physical condition—for those with the most resistance and vigor have a definite advantage in avoiding pneumonia and other winter ailments.

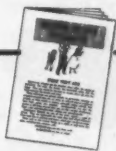
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paratus (see chart, below) contribute their share of interference to radio services such as two-way, short wave, and television.

And now that television is expanding at a fast clip, there is a good chance that industrial appliances will bother it even more. The interference won't be widespread. It will be mostly in industrial areas close to television stations.

But one engineer, manager of a large manufacturer's electronics division, puts it this way: "Interference problems... will be encountered more and more. TV sets are appearing in large numbers in industrial locations, and apparently more and more R-F generators are appearing in what we might call 'nonindustrial' areas."

• **The Rules**—FCC has written up a code of regulations for industrial equipment to curb this interference. The plan has been to work the problems out on a long-term basis. Since 1947 one part of the regulations has required the operator of a heating unit to use good engineering standards. Come June 30, 1952, the commission will enforce another part of its regula-

tions, calling for still better engineering in the design as well as the operation of a unit.

Under the long-term plan, a company has a chance to write off the investment in its equipment. And, later, it can either buy new equipment of better design or modify the design of its old gear. The interim has also given the heater manufacturers enough time to improve the engineering of their products.

When the FCC's deadline comes around next year, the heater circuits must be redesigned to cut down radiation of the spurious signals and to hold within the industrial band. Or if that can't be done, the equipment must be enclosed in some sort of metallic shield that will prevent the radiation.

• **Job for FCC**—It will be a big job for FCC to enforce its regulations, for there are already a raft of industrial heaters in operation—many of them offenders. And even though the penalties for ignorance of the deadline are spelled out in the regulations, it's anyone's guess how tough the commission will actually get. The case of the plastics molder, though, may be some indication:

The company failed to stop the interference from its heater. So FCC got a federal court to issue a restraining order, and as a result the plant has been closed since last April. Presumably, it can open up again as soon as it gets in step with the regulations.

• **Job for Industry**—Complying with the FCC's requirements can be a major project for owners of industrial heaters. The job means considerable work on the equipment, and it takes a lot of knowhow on the part of company or consulting engineers. Remington Rand, Inc., recently wound up a project at its Bridgeport (Conn.) electric shaver plant that is now a classic in the business.

Rem Rand dug into the job for two reasons: It had received a few consistent complaints of interference from TV viewers in the neighborhood of its plant. And it was faced with the purchase of new heaters to meet the FCC's deadline.

So Rem Rand went to work. First, Philip S. Rand of the company's laboratory of advanced research traced the extent of the interference with electronic measuring instruments. His measurements showed that the TV sets picked up the interference through the TV antennas, over the power lines, and directly from the heaters.

Next, Rand's group removed the heaters from the production line over weekends and revamped them. Metallic shielding, built around the heaters, kept the radio power inside the machines where it belonged. And electronic filters in the power lines of the

Besides industrial heaters, other electrical and electronic apparatus causes a fair share of interference to TV and radio reception. The types below are listed by their rate of occurrence:

**Ignition systems** of automobiles are a nuisance, though rarely strong enough to spoil a picture completely. The cure: Some auto makers are equipping cars with a harmless kind of spark plug.

**Diathermy machines** in hospitals and doctors' offices create havoc locally; out-of-date units are the worst offenders. Newer machines are designed for reduced interference.

**Old-type lamps** with the clear glass bulb and the W-shaped lighting element are rare these days. But they cut up a TV picture with black streaks, are hard to locate in a TV area.

**Radio transmitters** are used by broadcasting, overseas, point-to-point, and amateur services. Trouble from them is usually confined to a short radius around the station.

**Household appliances** make more noise in broadcast than in TV receivers. Like auto ignition, they are mostly a nuisance.





## Steel shipment for a secret weapon

Here is a brand new steel for use in a secret electronic device. It was developed by Armco at the request of the U. S. Navy.

This steel, wound on the four little spools you see, is only one-tenth the thickness of a human hair. Because of its super-thinness, these miniature steel coils were shipped in an aspirin box instead of in a boxcar.

Manufacturers of home and industrial products are familiar with many other Armco Special-Purpose Steels. Their qualities range from fighting rust to holding porcelain enamel in a lifetime bond.

And Armco research technicians are developing new metals right along. For example, newcomers to Armco's large family of stainless steels are two special types for products requiring high strengths and hardnesses.

Although Armco Special-Purpose Steels are in short supply now because of defense needs, keep them in mind in designing your future products.

### MORE SCRAP FOR MORE STEEL

More steel scrap is needed for top steel production.

The new furnaces the steel industry is building cannot be operated at capacity with the present scrap supply.

To help the nation—and yourself—sell your steel scrap now!

**ARMCO STEEL CORPORATION**

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Overnight coverage...  
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REACHES 40-MILLION PERSONS

## New In-Transit Point East or West Offers Distribution Savings

Complete warehousing service now offered at Horseheads

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Horseheads Industrial Center is served by 30 truck lines and 4 railroads: D. L. & W., Lehigh Valley, Erie, Pennsylvania. New construction offered on low-rental basis, for storage, processing, assembly.

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heaters prevented the interference from traveling to the TV sets.

This clean-up job on the interference has saved Rem Rand the price of a new line of heating units. And the TV viewers in the neighborhood of the plant are happy again.

• **Delicate TV**—When interference smears a TV screen, it's hard to convince the owner that his high-priced set might be faulty. And often, it isn't: Interference isn't a sign of poor quality or bum engineering in a TV set. A video receiver is a complicated and sensitive package of electronics; it can't always reject strong interference from a local source, while receiving a weaker picture signal from a distant station.

The trouble is that the parts and engineering of a television set naturally add up to a high price. And a TV set manufacturer can't add fancy trimmings—such as filters that reject interference—without increasing production costs.

Early in the business, some TV sets were stripped down to the point where they caused interference and bothered the screens of other nearby sets. But as television grows, the manufacturers are improving set engineering—and yet keeping the prices at a competitive level. Now the trend is to design circuits that reject everything but the picture signal.

• **Interlocking Design**—The interference poses a tough problem for the manufacturers, whichever side of the fence they're on. Some who make both TV sets and industrial heaters are in a better position, though. They can combine their engineering from both sides.

For a long time General Electric, for instance, has had an inductive coordination committee that meshes the design of such industrial and consumer equipment.

That way, the components of each type can be designed so that, electronically, they avoid rather than interfere with each other.

## PRODUCTION BRIEFS

**Hot-spray painting** (BW—Nov. 24 '51, p62) developed by Sherwin-Williams Co. is being used on freight cars by Pullman-Standard Car Mfg. Co. The paint is thinned by heat instead of by a solvent. S-W says one coat of the hot-sprayed enamel equals two coats of conventional freight-car paint.

**Rayon, cellophane, and plastics** are possible uses for bagasse, the pulp residue of sugar cane, according to Edward L. Powell, Chattanooga (Tenn.) chemist. The Herty Foundation, Savannah, Ga.,

is now turning out a 500-lb. batch of rayon from bagasse.

• **Convair** is attacking the manpower pinch by hiring Canadian and British engineers. The newcomers will work on Convair's 340 transport at first; when their government clearance comes through, they'll tackle classified projects. Until now, aircraft firms have avoided foreign engineers because of the red tape in clearing them.

• **Standard Oil's phenol plant**, going up at Richmond, Calif., will synthesize the chemical. The synthetic method doesn't need sulfuric acid or chlorine, which are now in short supply. Total cost: \$4-million.

## Stronger Plastic

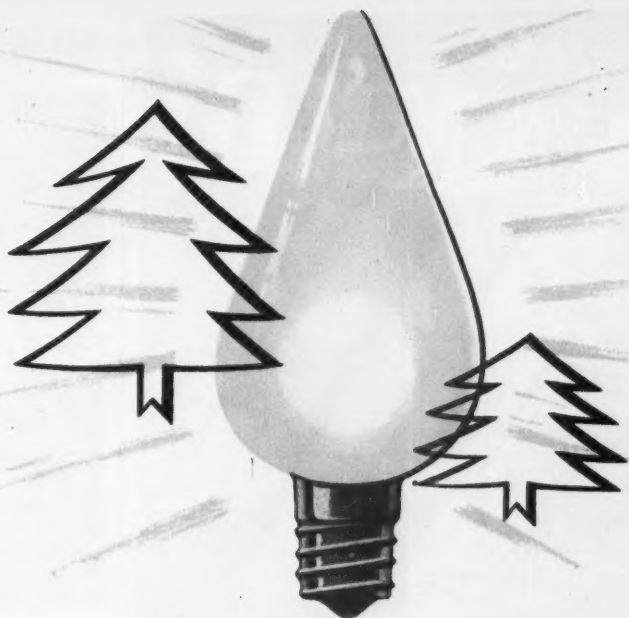
A new Plaskon, toughened by glass fibers, allows parts to be made in one piece rather than laminated.

Plaskon Alkyd, a plastic molding material of Libbey-Owens-Ford Glass Co., was so good that at one time no available machine could handle it (BW—Apr. 22 '50, p48). The plastic was designed for fast molding at low pressures in an industry that used mostly high-pressure presses. Using the resin on an ordinary press was similar to running a Model T on high-octane gas.

• **Still Ahead**—Now that plastics molders have caught up to the resin with suitable presses, L-O-F has announced still another first for its product. A new plastic of the Plaskon line has glass fibers mixed with a resin binder. The combination improves the strength and electrical properties of parts made from it.

Glass fibers have been used before with plastics. But parts have been made only in laminate (or sandwich) form. With the L-O-F plastic, a part is molded all in one piece. During the molding operation the glass fibers line up in the part to give a good over-all strength. Or with a special mold design, the fibers will concentrate in one place to beef up any spot that has to carry extra stress.

• **Back to School**—L-O-F will have to coach most molder-customers along for a while because the plastic is so new to the industry. It might require a few modifications of shop practices that are set up for straight plastics. The Alkyd molds in about 20 seconds, which is about three times as fast as any other thermosetting plastic. So in some cases the plastic might need careful control in temperatures and in the timing of the molding operation.



# MERRY CHRISTMAS

May your holiday be merry and bright . . . yes, bright with the pleasure and peace of yuletide . . . and bright with the merriment and cheer of good fellowship.

In city and country, on farm and in penthouse . . . thousands of electric lamps will help light the season's festivities and lend cheer to gay gatherings.

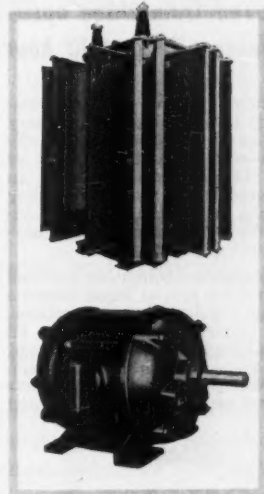
Christmas would seem incomplete without the help of electricity . . . the same electricity that helps make the products and provisions that are not only important at Christmas but every day of the year. Just as it provides the twinkling gems of light on your Christmas tree, it serves throughout the year to help you to another even brighter Christmas.

\* \* \*

Electricity is more important than you may think. Just about everything good depends at some time on electric power. Wagner Transformers and Wagner Motors serve you, and the industries that serve you, through helping provide the power for every need and pleasure. Wagner products are famous for dependable, trouble-free service at farm, home and industrial applications.

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# condensers CLEANED!

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AFTER

**MAINTENANCE problem  
solved with chemistry...  
profit-stealing deposits  
removed from three open box  
condensers in just 10 hours!**

by  
**DOWELL  
SERVICE**

The tubes of three open box condensers in a southwestern refinery were heavily encrusted. Cooling efficiency was impaired. In just 10 hours, Dowell Service removed an estimated 99% of the profit-stealing deposits. The resultant drop in cooling temperature increased the polymer yield 4½%.

Dowell-designed equipment was used to introduce special liquid solvents through regular water connections. These solvents penetrated to all parts of the boxes and dissolved and disintegrated the deposits. Mechanical cleaning of the boxes would have required extensive dismantling and

downtime with resultant production losses to the refinery.

Dowell Service can save real dollars in your plant maintenance program. Dowell Service methods are applicable to cleaning many different kinds of industrial process equipment without dismantling and with a minimum of downtime—boilers, heat exchangers, pipe lines, storage tanks and process towers. Often equipment can be cleaned while it is in use.

Call the nearest Dowell office for free consultation on your maintenance cleaning problems, or write direct to Dept. 507 in Tulsa for more information.

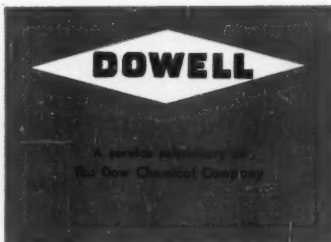


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80 strategically located offices  
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- Chemical services for oil, gas and water wells.
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## NEW PRODUCTS



For Window-Gazing . . .



. . . a Quick Flip . . .



. . . Now for Reading

If you've ever watched someone wearing glasses tip his head back and squint down his nose to read, you've seen one of the difficulties that go with bifocal lenses. Now a new frame for glasses makes it possible for anyone to wear bifocals without this kind of contortion.

Trimont frames have a little U-shaped spring attached to the nose pads of the frame. In normal position (top picture), you get a maximum walking or distance vision. But when you flick the spring down (bottom picture), you raise the reading area of the glasses 4 millimeters. For example: Sitting at your desk wearing regular frames, you can read only those papers lying directly in front of you without tilting your head; with Trimont, you will be able to read anything on the whole desk.

- Source: Page Optical Specialties, 192-02 Hollis Ave., Hollis 7, N. Y.
- Price: \$15 for Trimont frame.





## ANTIKNOCK COMPOUND

Every minute of every day this vital ingredient of gasoline helps millions of gasoline engines do more work ...and do it more economically

The power that America gets from its millions of gasoline engines is more important than ever. Today 70% of passenger-car mileage is essential. 75% of the nation's freight—much of it defense material—is moved by truck. Buses carry 25,000,000 passengers daily. Most all of the engines that power these vehicles run on gasoline. And, of course, it is gasoline that keeps our air transport flying and most of our military equipment rolling.

These engines are able to do more work, do it faster and more economically, because the gasoline they use contains a few drops of antiknock compound. Right now about 98% of the gasoline produced by U. S. refiners contains antiknock fluid to boost its octane number.

Higher octane gasoline makes possible higher compression engines—which provide higher performance and develop more work from every gallon of fuel. Without high octane gasoline these engines would knock or "ping"—lose power, overheat, and run up big repair bills.

So, you see, there isn't a moment of the day when antiknock compound isn't doing a job somewhere for our country. A product you never see is tremendously important, both in our daily lives and in helping to meet the demands of the defense program.

ETHYL CORPORATION, New York 17, N. Y.  
Manufacturers of "ETHYL" antiknock fluid



## Memo on Industrial Relations



### COMFORT HEATING IS EASIER WITH A **DRAVO** HEATER

Dravo *Counterflo* direct-fired Heaters, for heating large open spaces in industrial plants, provide heat *at the working level*.

Dravo Heaters don't waste their heat over the heads of the workmen. The 150 foot minimum air throw blankets from 4,000 to 20,000 square feet of working area with warmth, and holds it there! Employees are more comfortable, and worker efficiency goes up!

What's more: Dravo Heaters have a minimum efficiency of 80% . . . are easily installed and cost 30% to 60% less than a standard "wet-type" system . . . burn gas or oil . . . have low maintenance . . . are automatically controlled . . . heat quickly . . . can be used for year-'round ventilation.

### HERE'S WHAT ONE INDUSTRIAL RELATIONS MAN SAYS:



"We are very well pleased with our Dravo Heater. This type of heating system has proved to be a practical and economical solution to the problem of maintaining uniform temperatures for our repair shop."



### Want to know more?

Write today for a complete report on how your company can benefit by using Dravo *Counterflo* Heaters. Ask for Bulletin No. OS-523.

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# MANAGEMENT

## Lean Back and Listen . . .

. . . if you want to establish upward communications. That's the conclusion of one management group after studying the problem of getting ideas to flow up from below.

Communication through all the levels from the highest executive to the lowliest sweeper has been largely one-way traffic. Thoughtful executives have long looked for a channel to bring ideas upward as easily as orders and information funnel down from the top. Johnson & Johnson of New Brunswick, N. J., thinks it has come up with one good answer: A committee approach identifies the problem and goes a long way toward solving it.

In the past, management was chiefly concerned with the downward spread of ideas. So it already has a wealth of ways to communicate with the rank and file: company publications, bulletin boards, in-plant broadcasts, meetings addressed by executives. And management can always get its ideas across by praise, promotion, or penalties.

There are some channels, too, for upward communication: suggestion boxes, reports, group "think" meetings. Yet most businesses somehow fail to get at the grassroots, to get the full benefit of their employees' practical experience.

• **Self Criticism**—Johnson & Johnson is letting other companies in on the results of a novel approach to the problem. Its finding: Chief fault lies with executives. The novelty is that the finding was made by executives themselves, rather than by an outside consultant. This brings the lesson home to management, takes it out of the realm of mere theorizing by an "outsider."

J&J recognized two phases of the problem:

- The difficulty of getting ideas to filter upward through the ranks.
- The difficulty of selling management people on the idea that getting information from subordinates is a genuine problem.

The company aimed at two birds with the same rock. It adopted an executive-training plan worked out by Noel Hall at the Staff College, Henley-on-Thames, England. Hall calls it the syndicate system. It's really the committee approach to business problems.

• **Six-Man Team**—Johnson & Johnson picked six of their upper-level management people as a study panel, then handed them this job: Find out what it takes to assure the company an effective way to get information from the bottom.

In the process, the group (1) gave themselves an intensive, practical course in what the problems of communications are and (2) turned in a fresh, exhaustive study that's valuable to the rest of Johnson & Johnson's management. Even if nothing else ever came of the report, the study would have one valuable result: Johnson & Johnson now has at least six top-level executives who are communications-conscious.

• **No Cure-All**—At the outset, the committee found there just isn't any packaged plan that can automatically draw communications up from employees to management. The first trick is to find out what the barriers to communications are; the next is to try to pull them down. After that, it's time to start worrying about the best media for keeping information flowing.

Probably the biggest communications barrier, the Johnson & Johnson group says, is inherent in the industrial organization. By nature it is authoritarian. But, as the panel put it:

"Many think that business cannot continue to exist as we know it today unless more and more ways are found to bring the essentials of democracy into the workplace."

• **Who's to Blame?**—The panel puts most of the blame for poor communications on management people. The report directs its most trenchant remarks at bosses who intentionally or unintentionally give short shrift to what their subordinates think and feel. It finds:

"Listening and acting on the basis of what subordinates think, not what we think, or what we wish they would think, is absolutely essential to realistic management." If management doesn't first "dispel completely any feeling of disinterest or impatience with subordinates" and what they are saying, all its group meetings, written reports, and individual pat-on-the-back contacts are worse than useless.

• **Other Bottlenecks**—The panel listed some other communications bottlenecks that start with management:

• Bosses sometimes figure no news is good news. Actually, lack of complaint or criticism is often symptomatic not of a happy organization but of poor communications upward. In such



## ... contributes to improved production and morale in Nunn-Bush Shoe Plant

**B**Y actual experience with Pittsburgh COLOR DYNAMICS, executives in many plants are finding that color properly "engineered" on machines, walls, floors and ceilings of their plants produces more work per man-hour and more man-hours per man!

● **This new painting system** is based upon the simple fact that the physical, mental and nervous systems of human beings are affected and influenced by the energy in color.

The Milwaukee, Wisconsin, plant of the Nunn-Bush Shoe Company, one of America's foremost shoe manufacturers, is an example of the benefits that result from the use of COLOR DYNAMICS.

● **Three years ago** this plant was repainted according to COLOR DYNAMICS—walls, ceilings, floors and machinery. Focal colors were used on operating parts of machinery and eye-rest colors on stationary parts to en-

able workers to see their tasks better. Walls and ceilings were finished with morale-building colors to provide additional eye-rest areas. Safety colors were used to reduce accident hazards.

● **The benefits** to workers and management since repainting with COLOR DYNAMICS are told by Elmer E. Rexin, Nunn-Bush's Maintenance Superintendent: "Formerly machines were dark gray and the work benches were merely shellacked. Since repainting, we have noticed a decided change in the efficiency of our operations and in the morale of our workers.

"The new color treatment reduced eye fatigue, helped to improve the morale and created a more orderly appearance. Our employees became more conscious of cleanliness and each machine operator made great strides to keep his machine neat and tidy. The new color scheme also received many favorable comments from the many visitors who came to our factory."

### You Can Obtain a COLOR DYNAMICS Engineering Study of Your Plant—FREE!

Your plant may need COLOR DYNAMICS. Why not try this new painting system on a machine or two—or in one department? We'll be glad to make a scientific color engineering study for you FREE and without obligation.

There's a trained color expert at each of our offices located in all principal cities. Call your nearest Pittsburgh Plate Glass Co. branch and arrange to have our COLOR DYNAMICS representative see you at your convenience. Or send the coupon below.

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☐ Please send me a FREE copy of your new revised and enlarged booklet, "Color Dynamics in Industry."

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# PITTSBURGH PAINTS

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# Best belts by a dam site

**Building a Dam** sets up many problems for contractors, and one of them usually is the transport of aggregate—the gritty, abrasive filler of rock, sand or gravel used by the millions of tons in constructing the concrete wall of the dam. Moving it from quarry to dam site calls for careful planning.

**It Can Roll On Wheels**—trains or trucks. But many years' experience has shown that carrying huge tonnages at cheapest rates is the job where conveyor belts "shine." That has been proved in handling millions of tons of material on major Goodyear belted projects like the 10-mile "rubber railroad" of interconnecting belts used building Shasta Dam—the mile-long belt that set records for low-cost transportation at Grand Coulee—the 7-mile system at Bull Shoals. And conveyor belts have been by far the lowest-cost aggregate handlers on thousands of smaller projects as well. That's why the builders of the Southern flood control and power project you see here called in the G.T.M.—Goodyear Technical Man—to belt their rock handling system.

**Designed to Handle** much smaller quantities than the record-setting conveyor belt systems referred to above, the project is operating 16 Goodyear conveyor belts—in widths from 36" to 42" and center-to-center distances up to 1400'—from quarry to crushers, stock piles to concrete mixers. They'll handle aggregate for over a million cubic yards of concrete before this project is completed.

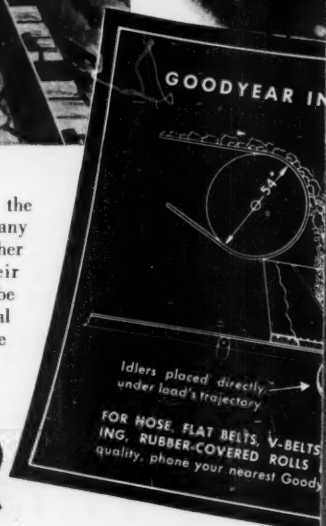
**Best Belts** for any conveyor operation can be selected by the G.T.M. from Goodyear's wide range of conveyor constructions. There's a belt to handle long, continuous cross-country runs of up to six miles in a single flight. At the other extreme, you'll find belts to handle small packaged items in your plant. Others resist extremes of abrasion, carry wet, "soupy" materials upgrade without back slip, carry 400°-hot materials. Whatever you want to carry, the G.T.M. can recommend a belt to do the job cheaper and easier.



**When You Consider Conveyors**, ask the G.T.M. to show you how—under many conditions—they can out-carry any other transportation, save more than their original cost while in operation, and be usable on other projects after the original job is complete. Ask the G.T.M., or write Goodyear, Akron 16, Ohio.

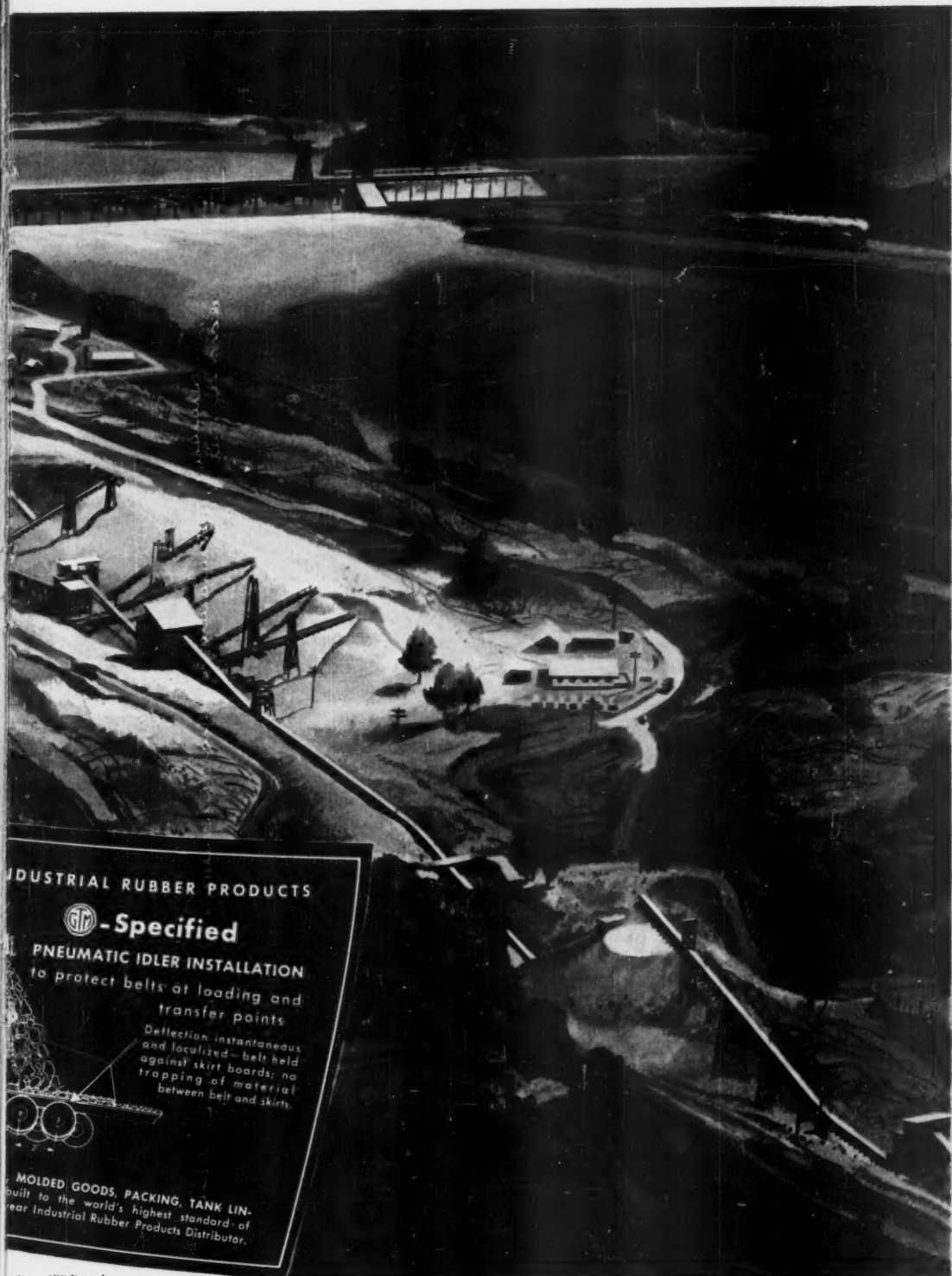
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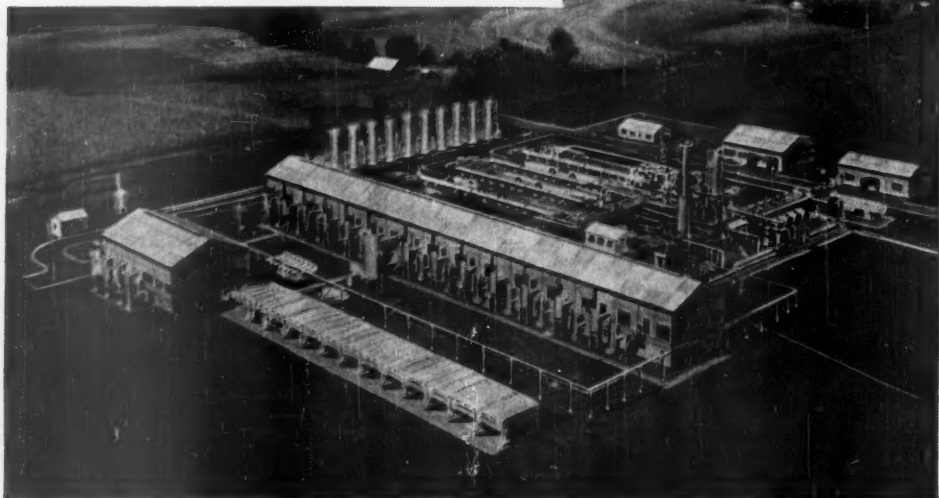
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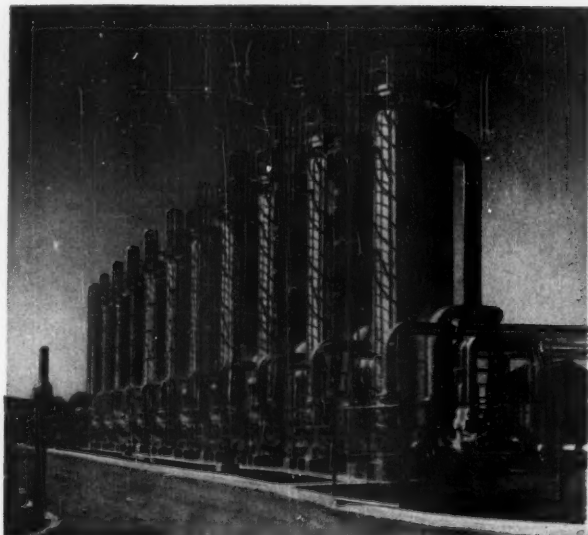
# **G**etting MORE THAN FUEL *from PIPELINE GAS*



Hydrocarbon Extraction Plant, Tennessee Gas Transmission Company

This plant of the Tennessee Gas Transmission Company at Gabe, Kentucky, is the first of its kind to be constructed adjacent to a major natural gas transmission line, for the further extraction of bottled gas and aviation and motor gasoline components from "dry" pipe line gas.

Stone & Webster Engineering Corporation made a report and appraisal of the economics, feasibility and best location for the project and was employed for the design and construction of the plant.



Battery of Dehydrators

**STONE & WEBSTER ENGINEERING CORPORATION**  
A SUBSIDIARY OF STONE & WEBSTER, INC.

cases, problems usually explode in management's face.

- Managers often resent comments that imply their actions are less than perfect. If management isn't willing to hear criticism freely, loyal employees (or those who want to keep their jobs) are likely to withhold information. All you get then is the gripes of employees who (1) don't like you anyway or (2) aren't interested in staying with the company.

- Management also tries to dodge personal problems of its subordinates. In dealing with people, you can't separate their work from their personal lives. If management tries to, it can't expect understanding from those under its supervision.

- Management often fails to act on unhappy conditions after they've been brought to its attention. That can end up by blocking off all future communications. If it happens too often, employees will decide "telling the boss" isn't worth the effort—or risk.

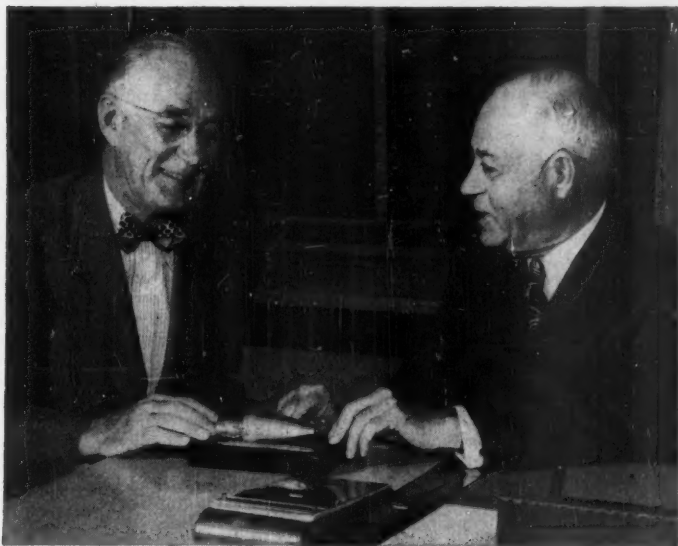
- Tradition—Subordinates themselves get some blame from the panel, but the report takes most of the onus off the lower levels in a company's organization.

For one thing, tradition, authority, and prestige for communicating are all on management's side. Communication automatically flows downward and is acted upon. Not so with upward communications; there's no pressure of authority or tradition.

- What to Do?—What can be done about all this? Johnson & Johnson's investigating team believes that the worst of the problem is solved as soon as a company's management understands it bears the biggest blame for poor communications.

It helps a lot even if a boss realizes that employees are quick to sense any sign of his dislike for what they are saying. That one realization can open up communications channels a lot quicker than any mechanical methods. Attitude surveys, suggestion systems, social gatherings are just window-dressing if they aren't based on sincere desire to understand people.

In making its study, Johnson & Johnson has a hardheaded purpose. It doesn't only want to hear the ideas of its rank-and-file employees—it wants to create a climate that will make workers more receptive to orders from above. That is the climate of two-way communication.



## A New President for National Gypsum

National Gypsum Co. this week changed presidents for the first time in almost a quarter of a century. Since 1928 Marvin H. Baker (right) has run the nation's No. 2 building materials supplies by tight-reined control. It worked, but now Baker figures the company is big enough to have broader management. (Sales this year will be near \$100-million, profits \$6.6-million.)

Baker becomes board chairman (a new post) with policy and long-range planning his bailiwick. He has no intention of retiring, though. Lewis R. Sanderson (left) moves up as president in charge of day-to-day operations. One other change: a sales reorganization to bolster export, industrial, and contract sales—taking up an expected lag in residential sales.

60% Savings in Man-Hours by this

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TRUCK

E-P  
Electric  
power is  
fume-free  
— cannot  
contaminate  
food.

At a large food warehouse, a typical materials handling job is moving 2000 cases from boxcar to storage. Previously it was done by 8 men using hand trucks—total man-hours required, 20. Now, an E-P power truck with 2 men does the work in 8 man-hours. *SAVING is 12 man-hours or 60%!* Truck also saves space by high stacking loads to the roof.

E-P trucks are helping solve today's manpower problem in over 300 different industries. You, too, can benefit by Elwell-Parker's more than 45 years' experience in handling materials on power trucks exclusively.

### FREE BULLETIN

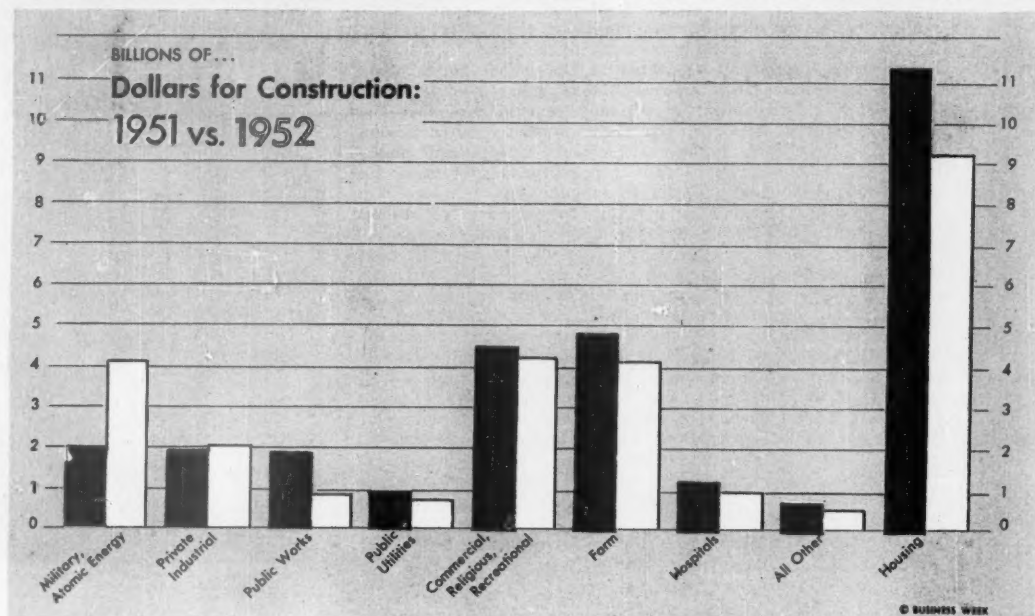
on Scientific Materials Handling. Ask for "Industrial Logistics" and name your product. Write The Elwell-Parker Electric Company, 4013 St. Clair Ave., Cleveland 3, Ohio.



**ELWELL-PARKER**

Power Industrial Trucks  
Since 1906

# CONSTRUCTION



WITH MATERIALS TIGHT, construction patterns will change. But military and atomic energy work will soar for another . . .

## Big Year for Construction in 1952

**Homebuilders, who are in line to take the bulk of any cut, still hope to get going on close to 1-million new units.**

The construction industry this year is doing almost \$30-billion worth of work—a record.

And 1952 should be almost as good. Despite their early fears of controls limiting credit and materials, homebuilders this year will start about 1.1-million units—second only to 1950's all-time high of 1.4-million. And other contractors are laying the foundations for the biggest industrial expansion program in history and carrying public building to a new high (cover).

Next year, though, there will be major changes within the industry—changes that will have their impact across the whole economy:

- Industrial expansion, atomic and arms plants, will go sailing along at a rapid, even accelerated, pace.

- Commercial building, highways, schools, and hospitals are in for a rough time. They're likely to drop from today's level.

- Homebuilding is likely to ease back slightly. Best estimate now: 900,000 to 1-million units in 1952.

These changes will be forced by

diversion of materials to defense, despite the fact that the nation's needs for some types of construction—particularly schools and roads—are building up rapidly. Backlogs in the industry are growing faster than at any time since the middle of World War II.

Changes like this in an industry that employs an average of more than 2.5-million workers will be felt a long way down the line. Oregon lumbermen and New York building trades workers will have another slow year—with commercial work and homebuilding restricted. Some of the construction industry's suppliers, like steel mills, will be overloaded. Others, whose products go primarily into new homes, will turn to defense work to offset a lag in production of their usual products. Children and drivers will be harassed by a lack of new schools and roads.

### I. Materials the Key

The industry's whole outlook focuses on materials. Government experts, appraising supplies for 1952, estimate

that total construction may run to no more than about \$27-billion. That's 10% off 1951, with the bulk of the drop (chart) concentrated in homebuilding. But homebuilders have consistently confounded the pessimists in recent years. Given any chance at all, they may well produce close to 1-million new homes next year. That would put total construction volume not too far below this year.

Material shortages are the one thing that will slow the industry down. Demand for construction runs heavy—particularly for highways, schools, and other community facilities. State and local governments are a long way from overcoming the backlog of needs built up on these facilities.

But materials—particularly steel and copper—are critical. Look at the picture on structural steel. Military demand for structural steel is now 10 times what it was before Korea. About one-third of the structural steel is committed to nonconstruction items—for example, freight cars, industrial machinery, and barges. Construction gets the rest—but the rest is still far from enough.

Allotments for the first quarter of next year are 47% higher than in the





## OUTDOOR INDUSTRIAL LIGHTING



MODERN OUTDOOR LIGHTING HAS MADE THIS PLANT STORAGE AREA AS ACCESSIBLE AT NIGHT AS DURING DAYTIME OPERATIONS.

# Double your plant area's usefulness by providing G-E outdoor lighting

Long ago good management tripled productive capability by providing proper *indoor* lighting—making possible extra work shifts when needed.

Now you can have 'round-the-clock "daytime" whenever you need it *outside* your plant as well as inside, with G-E outdoor lighting.

At relatively small cost, you can actually double the usefulness of your plant area facilities by doubling the time in which men can work there.

For example, in the above photograph, the outdoor area is used for storage of rough castings. When additional work shifts were added, it became necessary to light this storage area so that needed

parts might be readily located—regardless of the time of day. (Many plants still on one-shift operation avoid interrupting production by doing all their heavy materials handling at night.)

Moreover, good outdoor lighting will provide protection against pilfering, sabotage and costly accidents.

In these and many other ways, your investment in adequate G-E outdoor lighting will pay for itself over and over again. Write for the complete story in GEA-3640, "Outdoor Lighting for Industrial Plants." Address *General Electric Company, Schenectady 5, N. Y.*

# GENERAL



# ELECTRIC

451-466



*In these hands...  
evidence of a  
'good place to work'*

ScotTissue Towels are evidence of progressive, considerate management. Softer, more absorbent, they have a definite quality "feel" about them. They stay tough when wet, too, which means one towel dries both hands.

Washrooms rank as one of the four most important factors in good working conditions—according to a survey of workers from 400 plants. Specify ScotTissue Towels and you'll be doing your organization a real favor.

For suggestions on how to plan the *right* kind of washrooms, call on the Scott Washroom Advisory Service, Chester, Pennsylvania.

Trade Marks "ScotTissue," "Washroom Advisory Service," Reg. U. S. Pat. Off.

**SCOTTISSUE TOWELS**  
Symbol of the right kind of washroom

pre-Korea base period, but Washington estimates needs are 163% higher.

## II. Defense Calls the Tune

Defense agencies, of course, will dictate the changes in the pattern of construction next year. The National Production Authority passes on all projects except those using only small amounts of steel. NPA winnows out the postponable projects, whittles down materials requests to match supply, then gives contractors tickets for the metals they need.

Here in detail is how the pattern shapes up:

**Homebuilders**, who account for the biggest slice of construction, have a fairly rosy outlook. The official target is 850,000 home starts in 1952. But so was it in 1951—and it's being exceeded by 25% or so.

The market for homes next year seems solid—granting no further tightening of credit.

Actually, mortgage money is expected to ease up sometime next year. It has been tight enough this year to have kept starts from going even higher than they are. But the Federal Reserve Board's Regulation X wasn't so severe as it was supposed to be. And the terms were eased a little this fall. Credit regulations are also eased in the sections that are classified as "critical defense housing areas"—which will help builders there.

With credit easing, materials promise to be the bottleneck. But builders are now going along at a pace of more than 1-million units a year. Some still have inventories of materials cached away. And, with the steel industry expanding rapidly, they count on an easing of materials late in the year. They can also substitute—wooden center beams for structural steel, wooden gutters rather than copper—to keep going.

But no one can be sure of 1-million units in 1952. Materials shortages or tight mortgages could hit builders by midyear. And, as one expert puts it, "In a controlled economy, an administrative decision can knock any number of forecasts into a cocked hat any day."

**Industrial Building.** As you'd expect, the vast expansion program of American industry calls for a lot of bricks and mortar. The dollar volume of plants put up in 1951 was the biggest ever. And Washington thinks that plant building next year will hold—and maybe beat—this year's peak performance. Moreover, the big job of equipping these new buildings—which takes roughly twice as many dollars as does actual construction—still lies ahead.

**Commercial Building.** This year's commercial building—stores, warehouses, garages, and such—is going to come very close to 1950's. The credit

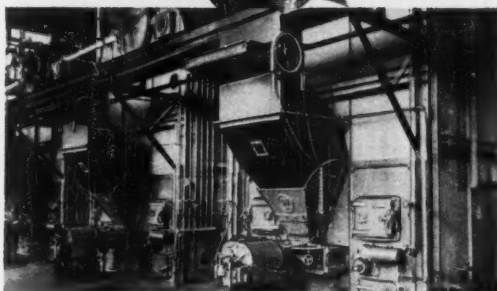
# "Orchids to Oppenheimer!"



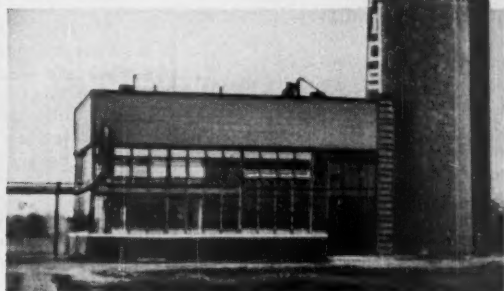
**THAT NEW COAL HEATING SYSTEM HE DESIGNED  
SAVED \$14,000 THE FIRST YEAR!"**

**says Carl R. Beckert, President, Thomas  
Young Orchids, Inc., Bound Brook, N. J.**

"We're the largest orchid-growers in the world—Phil Oppenheimer is our consulting engineer. Had to have the most *dependable* heat we could find—steady, quickly available—to protect two million dollars' worth of orchid plants. Our new coal-fired plant gives us that kind of heat—in addition saved us \$14,000 the first year! We've discovered that with modern equipment coal is as clean and automatic as any other fuel—and to do the job with oil would have meant an overall cost of 16% more! More than that, we can't take a chance on uncertain winter fuel deliveries. With *bituminous* coal we can store a year's fuel supply right on the ground."



The firing aisle at the new plant. This highly efficient coal equipment cut the company's fuel costs by 23%—is so completely automatic that it saved \$6,000 the first year on labor costs, too!



This 300-ton silo that Young installed does away with former handling and shovelling costs. Coal is fed from the silo by a screw conveyor to each boiler's stoker-hopper—the coal is weighed on its trip.

- Use coal now? Get ALL coal's economy with highly efficient modern equipment. Building a new power plant? Find out how much more economical, efficient a job *bituminous* coal can do. Call in a competent consulting engineer. He can show you the modern coal-handling and combustion installations that will save most while meeting your particular needs. Remember you can count on *bituminous* coal! Of America's total fuel reserve—92% is coal! Even today oil is *imported*—while America can and does *export* coal! Ample coal reserves plus the outstanding efficiency of America's mining companies give coal users the *greatest possible assurance* of a *dependable fuel supply at stable prices*.

**If you're running your own steam plant,  
here are just a few down-to-earth facts  
you can't afford to ignore!**

- COAL** in most places is today's most economical fuel.
- COAL** resources in America are adequate for all needs—for hundreds of years to come.
- COAL** production in the U.S.A. is highly mechanized and by far the most efficient in the world.
- COAL** prices will therefore remain the most stable of all fuels.
- COAL** is the safest fuel to store and use.
- COAL** is the fuel that industry counts on more and more—for with modern combustion and handling equipment, the inherent advantages of well-prepared coal net even bigger savings.

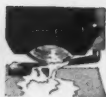
**BITUMINOUS COAL INSTITUTE**  
A DEPARTMENT OF NATIONAL COAL ASSOCIATION  
WASHINGTON, D. C.

FOR HIGH EFFICIENCY  FOR LOW COST  
**YOU CAN COUNT ON COAL!**

# Production News

ABOUT *Lusol*—THE ALL-CHEMICAL METAL-WORKING SOLUTION

FROM F. E. ANDERSON OIL COMPANY • PORTLAND, CONNECTICUT



## LUSOL OUTCOOLS, OUTPRODUCES ALL OTHER COOLANTS

You can get far greater production from your shop, and you can do it without adding a single machine or tool or man, simply by switching to Lusol. You can prove these facts about Lusol to your own satisfaction in your own plant—just as thousands of others have already done.

Lusol is a clear, all-chemical concentrate that is diluted with water and used in the coolant system of almost every type of machine tool—lathes, grinders, milling machines, saws, broaches, even rolls and presses. In each of these operations we have cases of increases in tool life as high as 500% and even higher. Less down time for tool dressing means greater production. Work stays cooler because Lusol is a super-coolant. Oilless Lusol reduces the surface tension of water so it penetrates to the very cutting edges of the tools, keeps grinding wheels from loading up.

● **Workers like Lusol!** A mild combination of chemicals, milder than most toilet soaps, Lusol by itself can't become foul smelling or cause dermatitis. Workers' hands, clothes and the surrounding floors stay clean and non-oily. Frequently, parts made with Lusol need not be degreased before painting, plating or assembly. While not a rust preventive, Lusol reduces the possibility of rust on parts that are stored between stages of production.

## users say\*

### case histories of Lusol at work

**A CONVEYOR MANUFACTURER**—"8,000 forged steel brackets produced per broach grind with Lusol in the machine, compared to the previous 3,500 pieces. Doubled production and less down time for changing broaches for resharping."

**A FARM EQUIPMENT MAKER**—"Have had outstanding success on deep drilling in balancing crankshafts. Drill  $\frac{3}{16}$ " holes and, where we could only go  $2\frac{1}{2}$ " deep, we now go as deep as  $3\frac{1}{2}$ " with Lusol."

**A SUBCONTRACTOR**—"No greasiness on the finished parts, so we bundle them for shipment just as they come off the machines. Some have to be given a prime coat of paint; we simply wipe them off with a cloth and then spray them."

**A CRANKSHAFT MANUFACTURER**—"We wash \$5 worth of grinding wheel down the sewer every time we dress a wheel. Since we adopted Lusol for our entire grinding department, we've saved an awful lot of money by reducing the number of dressings our wheels require."

\*Users' names furnished on request.



## FREE BOOK

Get complete facts about Lusol by writing for this 20-page booklet. It contains information on machine cleaning, maintenance of Lusol solutions, elimination of dermatitis and odor in machines, plus many case histories of Lusol at work. Write F. E. Anderson Oil Company, 211-H, Portland, Conn.

"... great as is the need, it's unlikely that road systems will gain . . ."

CONSTRUCTION begins on p. 54

for keeping it from surpassing 1950—or the blame, depending on how you look at it—belongs to the government. Commercial building rolled through the first half of this year at a record rate—an annual rate of \$1.6-billion in June. Now with NPA denying many of the requests for permission to start work, volume is only slightly more than half of what it was in June. Prospects for next year: still lower.

**Public Utilities.** Almost every type of public utility construction except that for pipelines and electric light and power companies is due to be curtailed in 1952. Both pipelines and power are growing rapidly, war or no war.

Government experts feel that some public services, like telephone and telegraph, would have eased back on their construction programs in 1952 in any case. Companies say that they are fairly well along on their postwar expansion programs and can defer some work. But most utilities would like, and could get, the financing to enlarge their construction programs.

**Public Works.** While that new school house may have to be postponed next year, the federal government will boost its spending for atomic energy plants and military construction by more than \$2-billion. That alone is enough to insure a rise in total public construction.

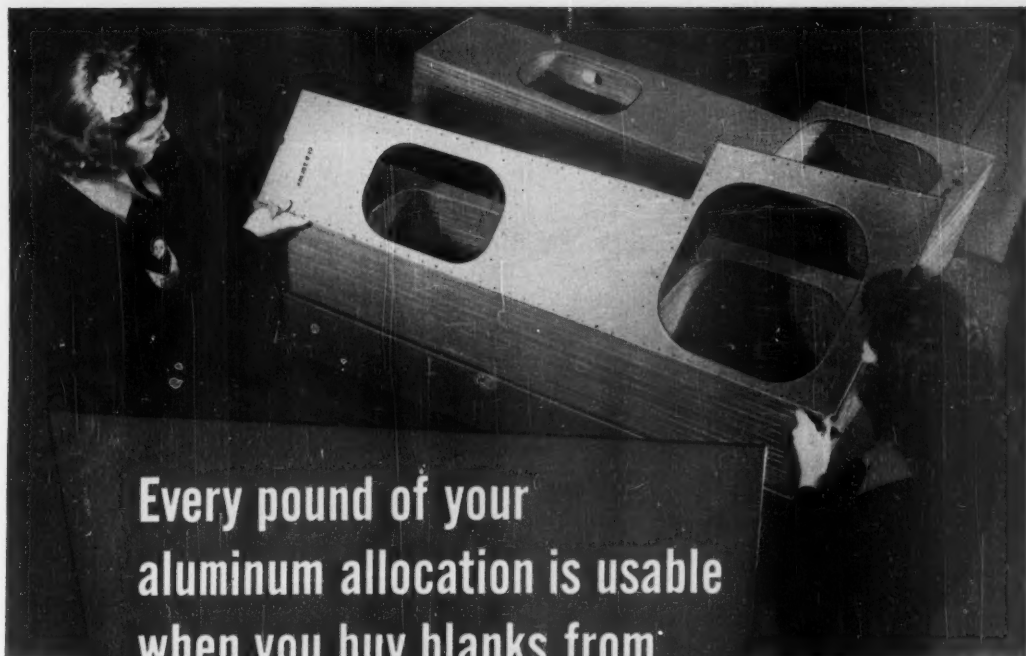
Military and naval construction was relatively insignificant up until this year. Even when you add public industrial construction (atomic, and arms plants), the total construction bill in 1950 was only \$400-million.

This year it has multiplied to about \$2-billion. Next year it may well double again. By then it will be accounting for 15% of all construction—against 1% last year.

● **Falling Off**—Other types of public construction—notably highways, schools, and hospitals—are likely to run at a lower level in 1952. They're likely to drop in spite of the fact that needs for them are growing. In highways, for example, estimates of what it would take to give the country a first-class system run from \$40-billion to \$50-billion. But great as is the need, it's unlikely that road systems will gain ground in 1952.

School administrators are in the same straitjacket. Cities and towns are building about the same number of schools this year as in 1925, the peak year. Yet next year 1.7-million new students will be trooping to school, the biggest increase in history.





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aluminum allocation is usable  
when you buy blanks from...

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Reynolds Aluminum Fabricating Service offers extensive facilities to produce semi-fabricated blanks or completed parts ready for assembly. Quotations on aluminum blanks or parts can be furnished to your drawings and specifications. Technical assistance from aluminum fabricating specialists is available for your problems.

For additional information, write for literature, or call the Reynolds office listed under

"Aluminum" in your classified telephone directory. Reynolds Metals Company, Parts Division, 2085 South Ninth Street, Louisville 1, Kentucky.

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- Over 100 mechanical presses ranging from 5 to 1700 tons.
- Hydraulic presses from 50 to 500 tons.
- Equipment for shearing, blanking, forming, riveting and welding, roll forming, finishing and assembly.

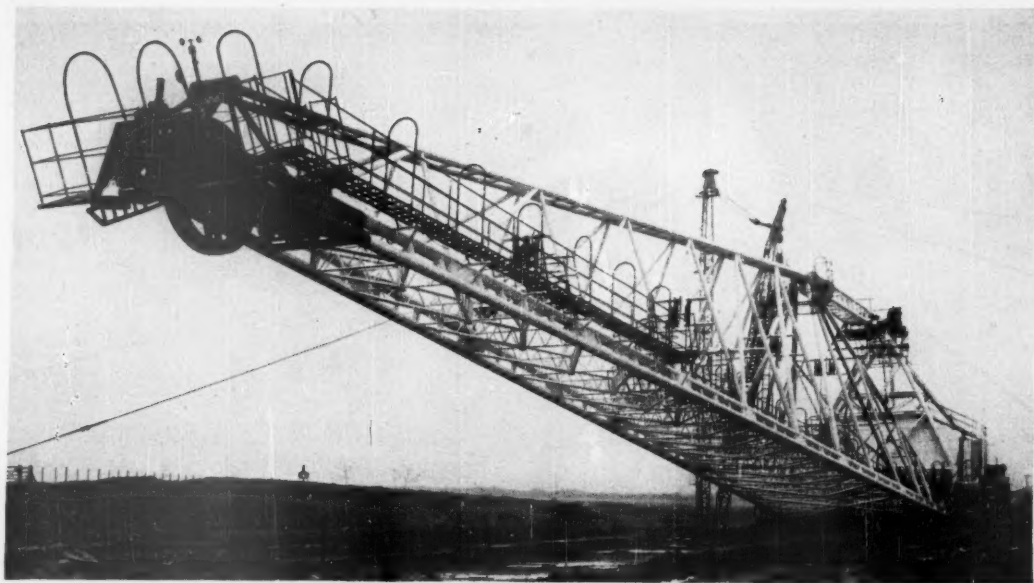
These facilities can assure a steady flow of blanks or fabricated parts to your specifications and production requirements.

BE SURE TO see The Kate Smith Evening Hour every Wednesday, NBC-TV, hear The Big Show with Tallulah Bankhead every Sunday, NBC Radio Network ... consult newspaper for local time and station.



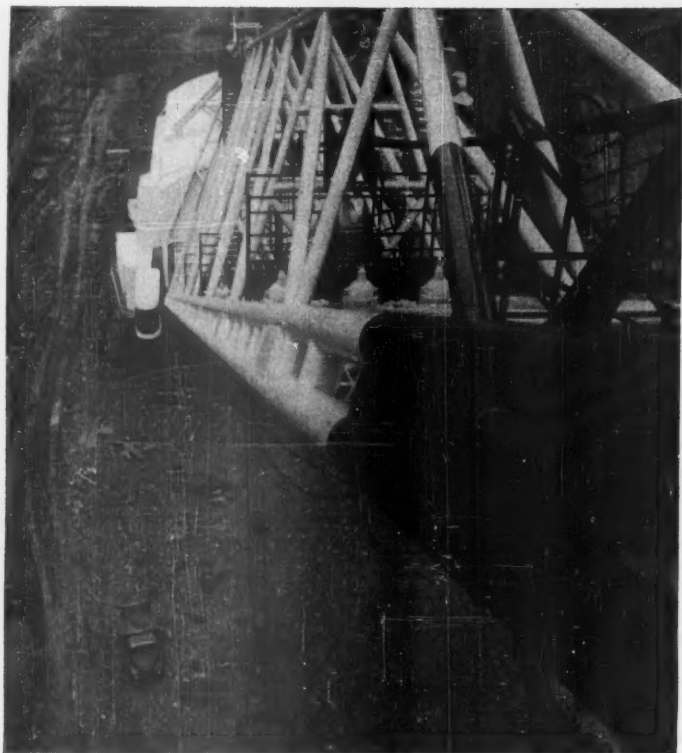
## REYNOLDS ALUMINUM FABRICATING SERVICE

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"WALTER," biggest walking dragline in the world, will dig deep for England's hard-to-get iron ore.

## How Grasping Can a Dragline Get?



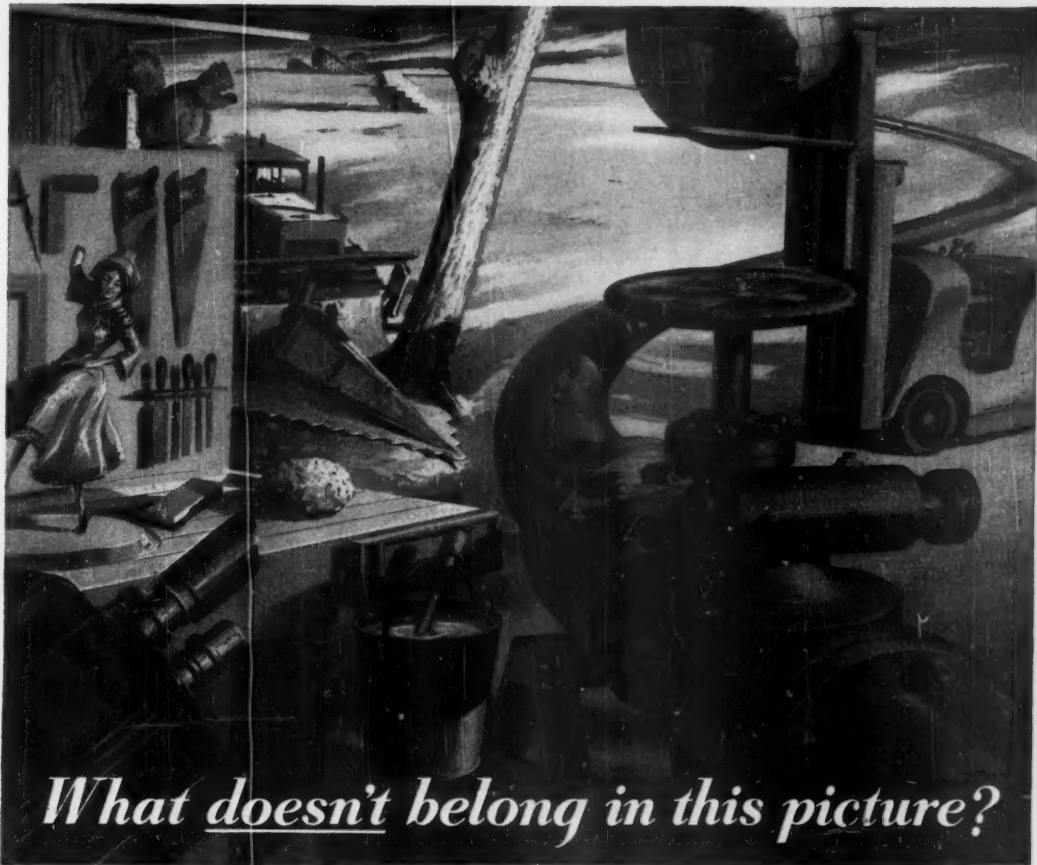
MAIN COMPRESSION MEMBERS were assembled in 40-ft. lengths, welded on site.

It took the biggest walking dragline in the world to get the ironstone out of 75-ft. deep open-cut quarries at Stewarts & Lloyds, Ltd., works near Corby, in Northamptonshire, England. But when the steel company had to cope with 100 ft. of overburden—clay, limestone, and sand—it had to have a bigger-than-the-biggest dragline.

S&L took its problem to Ransomes & Rapier, Ltd., of Ipswich, asked the company to design and build a machine to meet the requirements. R&R's answer was "Walter"—the behemoth W. 1,400 that will strip the overburden from the ironstone bed down to a depth of 100 ft. It digs its own weight of 1,600 tons every hour. Its 22-ton bucket takes bites of about 27 tons at each fill of the bucket. It can walk along the quarry in 7-ft. steps. And it's controlled entirely by one man.

In working position, the head of the 282-ft. jib is 175 ft. above the ground. It has a dumping radius of 260 ft., and when it slews the head of the jib reaches a speed of nearly 23 miles per hour. The base structure, or tub, has a diameter of 48 ft., is 4 ft. high, and weighs 227 tons. Floor space of the revolving cab measures 4,387 sq. ft. Inside the cab there is an upper and a lower deck, the lower deck space divided into three air-conditioned compartments.

The machine operates entirely by electricity taken at 6,600v. through two trailing cables.



## *What doesn't belong in this picture?*

All but one of the objects in this picture have something in common — Norton or Behr-Manning products are important factors in their manufacture and in their quality. *Can you find the stranger?*

**The "sawdozer?"** No! This spectacular time-saver, which cuts down trees up to 24 inches in diameter with a single stroke, owes much of its power and stamina to parts ground by Norton and Behr-Manning abrasive products. That 6-foot, V-shaped saw blade, for example, is kept sharp by Norton grinding wheels.

**The tools?** No! Their utility and strength come from operations in which Norton and Behr-Manning play vital parts. The best way to give a razor edge to a chisel, for instance, is to sharpen it with a Norton Abrasives INDIA oilstone.

**The figurine?** No! It was fired for hours in a kiln

on refractory shapes made of a special Norton CRYSTOLON refractory mixture.

**The sponge?** No! While frozen, it was shaped by a Behr-Manning coated abrasive product.

**The stranger in the picture** is the squirrel. Remember, any man-made product . . . whether of metal, wood, paper, cloth, leather, ceramics or plastics . . . depends in some important way on abrasives, abrasive products, refractories, or grinding machines that bear such well-known trade-marks as Norton and Behr-Manning . . . world's largest manufacturers of abrasives and abrasive products.

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*Making better products to make other products better*



**NORTON COMPANY**

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**BEHR-MANNING**

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ABRASIVE PAPER AND CLOTH • OILSTONES  
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 SEVENTH OF A SERIES



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They're rubber that won't melt on hot aircraft engine cylinders or freeze on switches that operate bomb bay doors at 100 degrees below zero. They're electrical insulating resins that double the power of electric motors or multiply by ten the life of electric machines.

Silicones are mold lubricants that eliminate 90% of the scrap in the rubber industry; save 80% of the cost of cleaning molds. They're paints that protect metal at 1000° F. They're work savers and life preservers, conservers of copper, protectors of metals, foam killers . . .

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told for the first time in a comprehensive and easy to read booklet entitled, "What's a Silicone?" It's written to be read profitably by scientists and engineers, business men and professional people.



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MIDLAND, MICHIGAN

## READERS REPORT

### Small Business Troubles

Dear Sirs:

I thought you would be interested in another example of what the small businessman is faced with under today's governmental regimentation. Recently, I addressed a letter to the local office of Wage Stabilization regarding information as to what "wage increases are permissible at the present time under existing regulations" for office secretaries, also for copy writers and production men. I got back 45 pages of material in a large manilla envelope with no letter of explanation. Most of the material is printed in very fine type, much of it three columns of almost agate type to a page, and very little of it applying to the small business situation, or my questions.

I suppose that I could turn this over to an attorney, and for a fee get a ruling from him after he had studied it for a period of time. But I believe—and feel that you will agree—that small business should not be put through this extraordinary expense in order to get an answer to a simple question.

I have heard various conflicting opinions from other businessmen as to what is permissible under the present regulations, so I will probably end up by accepting one of these opinions and acting upon it. I do not feel obligated to study 45 pages of typed material or to have a firm of attorneys study it for me and write an opinion, in order to have these very ordinary questions answered for me. What do you think?

WILLIAM H. STOCKWELL

STOCKWELL & MARCUSE, ADVERTISING  
 DETROIT, MICH.

• Reader Stockwell is one of many businessmen with this complaint. In BUSINESS WEEK surveys about what troubles businessmen this is the most prevalent complaint against the federal government.

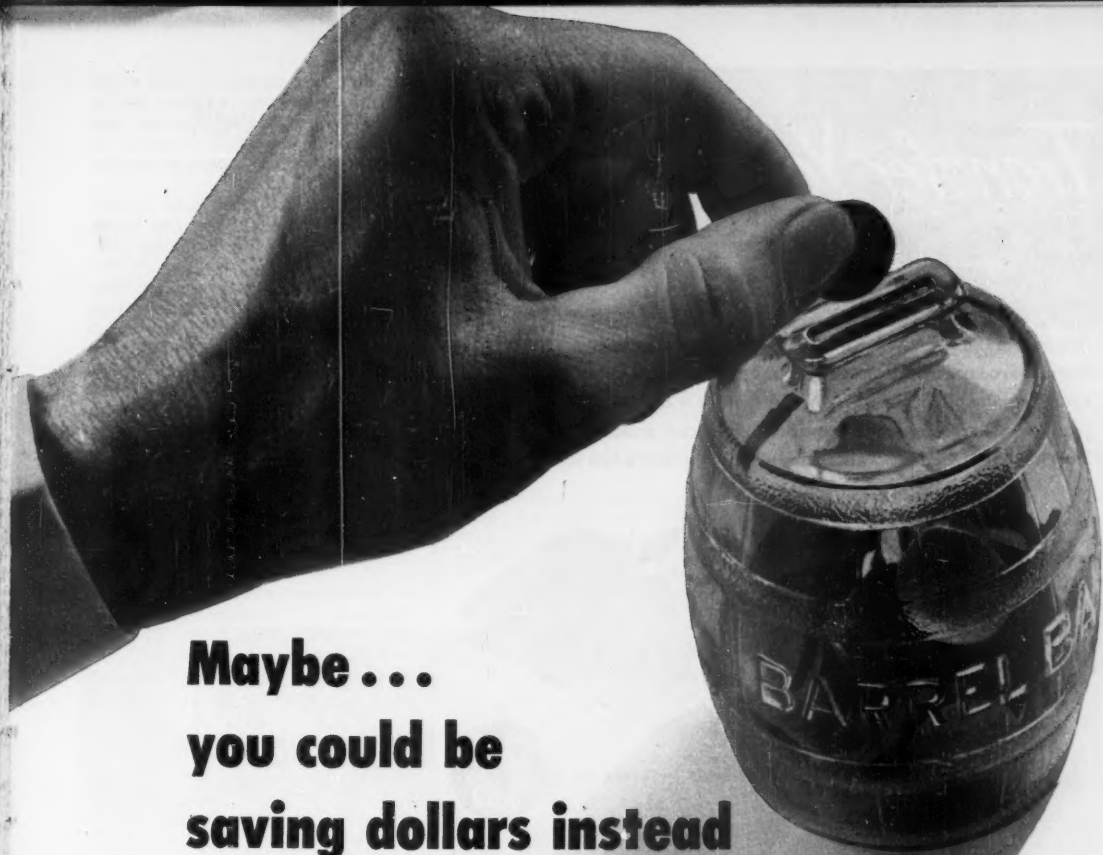
### Beef Mixup

Sirs:

The first sentence in your article "DiSalle's Lid Holding on Beef Prices" [BW—Nov. 10 '51, p24] reads: "It looks as if Mike DiSalle is winning the beef-price battle." Then you go on to refer to the hints around Washington that DiSalle might have to decontrol beef unless he secured the power again to impose slaughtering quotas.

The way this article is set up, it seems to me you give a misleading impression of the situation. It was the industry that insisted that the slaughtering quotas should not be reimposed,





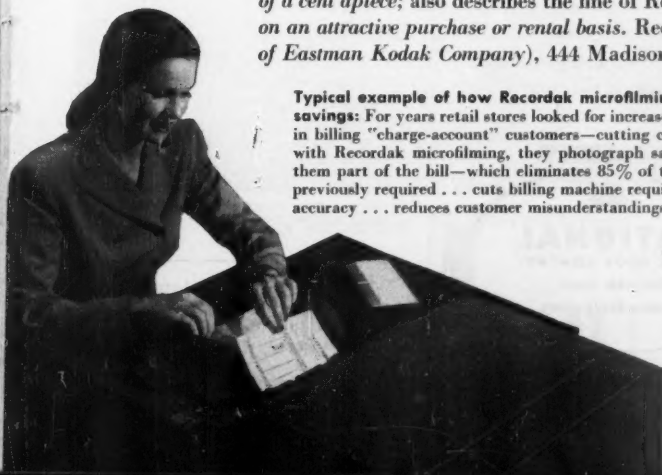
## Maybe . . . you could be saving dollars instead

If you are now duplicating information by hand or machine—and are convinced that your present routines are "most economical"—you really owe it to yourself to investigate Recordak microfilming.

Thousands of companies—in 65 different types of business—have done so . . . *much to their surprise.* For they found that this truly remarkable process could immediately slice costs which had been only scraped lightly by previous streamlining.

Write for a free copy of "50 Billion Records Can't Be Wrong." It suggests systems' short cuts . . . shows how Recordak microfilming copies documents with photographic accuracy and completeness—*instantaneously, for a fraction of a cent apiece*; also describes the line of Recordak Microfilmmers now offered on an attractive purchase or rental basis. Recordak Corporation (Subsidiary of Eastman Kodak Company), 444 Madison Ave., New York 22, N. Y.

**Typical example of how Recordak microfilming gives unexpected savings:** For years retail stores looked for increased speed and accuracy in billing "charge-account" customers—cutting costs bit by bit. Now, with Recordak microfilming, they photograph sales checks and make them part of the bill—which eliminates 85% of the posting operations previously required . . . cuts billing machine requirements . . . increases accuracy . . . reduces customer misunderstandings.



# RECORDAK

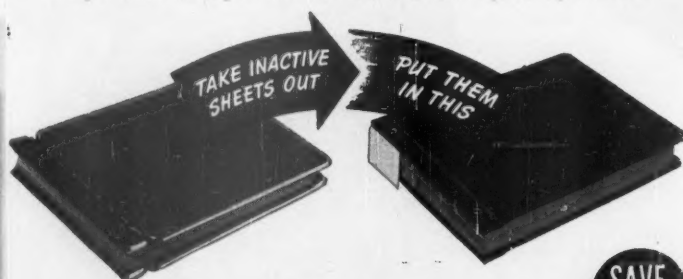
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**Inactive SHEETS AND RECORDS** that clutter up your regular binders are squatters that cost you money. They take up valuable room in valuable binders. More and more it has become today's practice to transfer them to thriftily priced transfer binders. They're there when you want them — out of the way when you don't!



New Lockmaster® 9741 Binder, Cost \$8.75—Transfer Binder 9441, Cost \$2.10

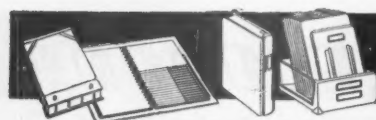
SAVE  
\$6.65



Ringmaster Visible Binder R1932, Cost \$18.00—Transfer Binder 7603½, Cost \$3.75

SAVE  
\$14.25

Remember, you not only save money by transferring inactive records to inexpensive transfer binders but your record-keeping needs can be adequately met in these days of short supply. See your National stationer today.



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that they were unnecessary and would tend to confuse the stockman and to imperil the program for increased beef production that we have advocated all the way as the only practical solution of the meat problem.

DiSalle, on the other hand, insisted that he must have the slaughter quotas and that he could not do the job without them.

The facts now prove that we were right and he was wrong, and yet your article clearly gives the impression that the reverse is true. If Congress had unwisely given him the power to reimpose slaughter quotas, he would have managed to mess things up with them, and the current situation might not be nearly so favorable as it now is.

F. E. MOLLIN

EXECUTIVE SECRETARY  
AMERICAN NATIONAL CATTLEMEN'S  
ASSOCIATION  
DENVER, COLO.

• The BUSINESS WEEK story referred to arguments in Washington at a later stage, when Congress had already turned down quotas. The question then was: Could DiSalle make controls work in spite of his defeat on quotas?

## More Food, Fewer Workers

Gentlemen:

I agree with your belief that farm machinery has been a factor in providing more food for more people with fewer farm workers [BW—Dec. 8 '51, p9]. However, I'd like to bring to your attention this fact: Fully 25% of America's crop production comes directly from the use of commercial fertilizer. This is a statement of the U. S. Dept. of Agriculture.

Not only does the use of commercial fertilizer make our present crops possible, but also the use of fertilizer enables the farmer to grow larger crops and still use fewer "hired-hands," thus relieving the current labor situation.

The use of commercial fertilizer on the soils of our land makes it possible for farmers to plant more high yielding, high nutrient-demanding seed per acre. . . . A greatly multiplied yield per acre is the result.

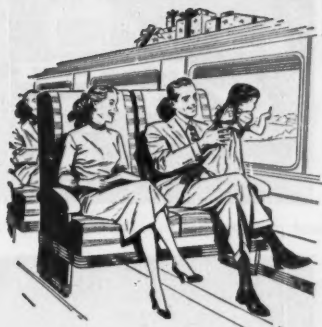
A consequence . . . is that fewer acres need be plowed and planted to grow a given crop today compared to a crop of equal size 15 years ago.

JOHN F. GALE

ECONOMIST  
NATIONAL FERTILIZER ASSOCIATION  
WASHINGTON, D. C.

Letters should be addressed to  
Readers Report Editor, BUSINESS  
WEEK, 330 West 42nd Street,  
New York 18, N. Y.

## Now—a wonderful new kind of comfort for travelers—made possible by Honeywell Controls!



Ever wonder what it takes to keep passenger trains as comfortable as your living room, winter and summer?

Just imagine a cold, blustery winter day . . . and a streamlined train speeding on its way at the rate of 90 miles per hour.

Outside, the wind and the cold are "refrigerating" each car, while inside, the heating equipment and controls are laboring to maintain comfortable temperatures.

Controlling car temperatures in any season has always been difficult. But the new Honeywell *electronic* car heating and cooling system—now being installed by leading railroads—has proved that

real passenger comfort is now a reality.

Helping make trains more comfortable is just one way Honeywell helps America live better, work better. You'll find Honeywell controls making travel more comfortable in planes, ships and buses, too; in hundreds of industries, doing hundreds of different production jobs. In millions of homes, schools, and commercial buildings where the familiar thermostat on the wall helps guard America's health and comfort.

This is the age of Automatic Control—everywhere you turn.

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**Efficiency**

**T**WO MEN, handling a one-man materials-handling job, waste time, money and manpower. New easy-roll COLSON Casters make light of heavy loads—let you shift that second man to another job.

COLSON engineers, with years of successful experience in materials-handling problems, are glad to help you select the right wheels or casters to bring your old rolling stock up to date. Write us or consult the "yellow pages" (under "Casters" or "Trucks—Industrial") for the COLSON office near you.

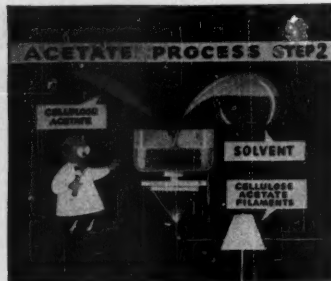
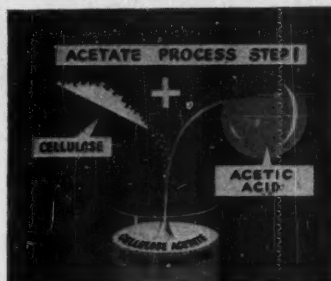
THE COLSON CORPORATION  
ELYRIA, OHIO

Please send free catalog—"Colson Casters"

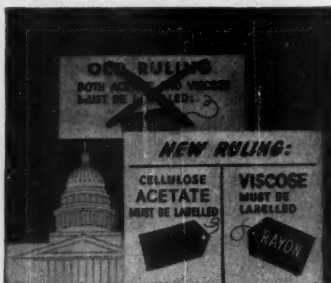
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City \_\_\_\_\_ Zone \_\_\_\_\_ State \_\_\_\_\_

**THE COLSON CORPORATION**  
ELYRIA, OHIO

## MARKETING



SLIDE FILM by Celanese Corp. shows different processes used to make acetate and . . .



VISCOSE FIBER, both heretofore called "rayon." This is part of job needed in . . .

## Pinning on the Acetate Label

FTC has ruled that "rayon" can be used only for viscose. This ends the confusion in fibers. But it poses Celanese the job of explaining what it makes and how it behaves.

What is acetate? What is it used for? How should you handle it?

Celanese Corp. is spending several million dollars to tell people the answers to these questions.

The reason is that Celanese is the largest U.S. producer of a product that is about to get a new name. For more than a decade acetate fiber has been lumped together officially with viscose fiber under the name of rayon. Last week the Federal Trade Commission finally changed the terminology. It ordered that after Feb. 10 only viscose may be called rayon. Acetate must be called just that.

• **Unlike**—This was welcome news to the industry as a whole. The forced marriage of viscose and acetate has long been a worry. Actually, though the two fibers are made from the same basic raw materials (wood pulp and cotton linters) and are both called cellulosic fibers, they are two different products. Their characteristics and uses vary. For example:

Acetate absorbs less moisture than

viscose, therefore dries out faster. Acetate drapes better than viscose. On the other hand, viscose wears better. Acetate is thermoplastic, which means that you can set pleats and so forth with heat. But it also means that you can melt your acetate dresses, underwear, draperies, or ties with an iron, at a fairly low temperature, whereas rayon stands up better under heat. Both sell for around the same price.

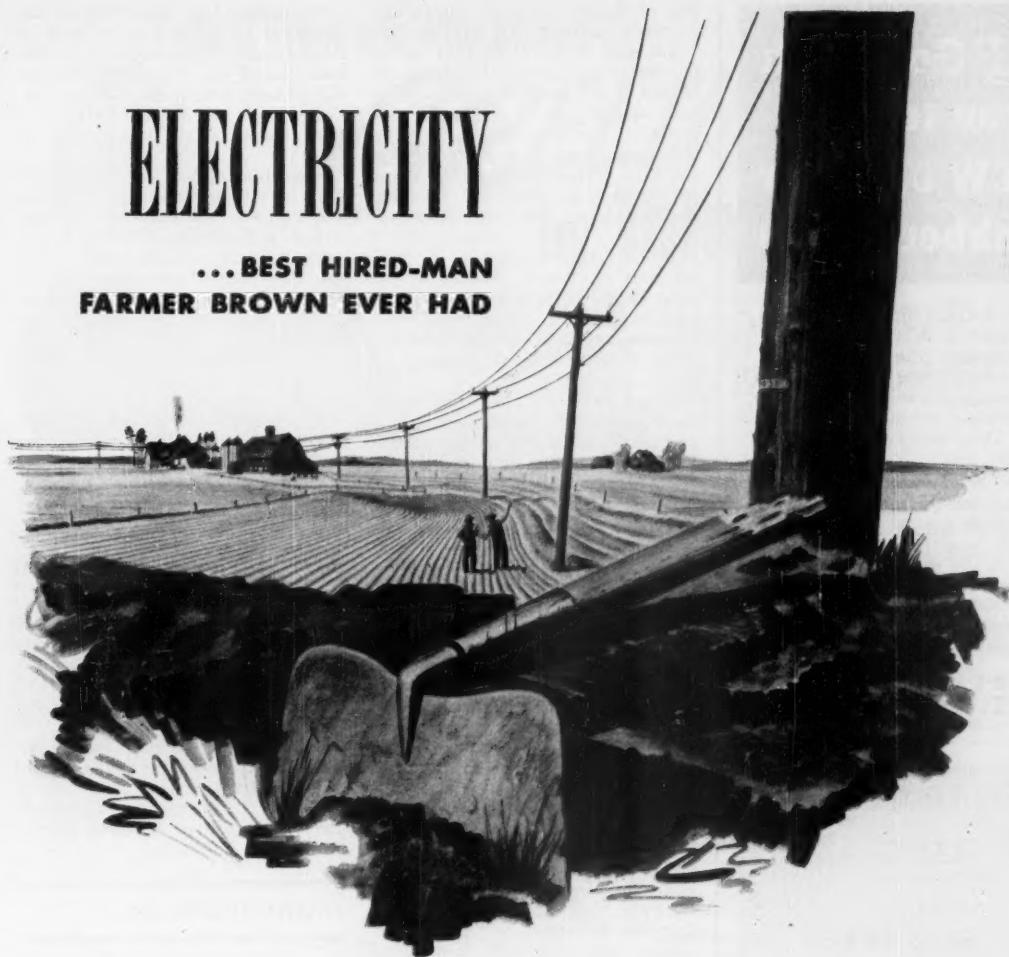
The news that FTC had finally decided to end the shotgun alliance made the industry happy, but brought a potential threat for Celanese. All the company's eggs are in one basket; it makes about half of the nation's acetate, but very little viscose. That leaves Celanese with the worry of switching from rayon, unsatisfactory as that name may have been, to the little-known name of acetate, which has hardly been heard outside trade circles. (Celanese makes only the yarn, of course; it does not make finished textiles or garments.)

• **Evolution**—How things got into this fix is a long story, involving the prob-



# ELECTRICITY

...BEST HIRED-MAN  
FARMER BROWN EVER HAD



Gone from more than 5 million farms in America is the proverbial man with the hoe—horny-handed son of toil, knotted and bent by back-bending labor in pursuit of a mythical harvest beyond the bare needs of existence.

Electricity — Farmer Brown's 20th Century hired hand — is now available to 95% of America's farms . . . ready to take over the lion's share of unpleasant chores . . . silently, efficiently, uncomplainingly . . . twenty-four hours a day. And, amazingly, average Farmer Brown buys his annual labor-equivalent of 183 men on a 12-hour day for less than half the monthly wages of a single human helper.

You'd have trouble, today, distinguishing City from Country life, so great has their community of interests become through increased leisure, travel, communication, entertainment—all outgrowths of the new hired-man. Mrs. Brown, too, is largely emancipated from the farm work-day of her mother's youth . . . thanks to the amazing energy of their new help.

On the farm, in the city, throughout office, home, and shop, electricity toils for America, giving her the highest standard of living and greatest productivity the world has ever known.



**ELECTRICITY...**  
so much for so many  
... for so little

## B.F. Goodrich can tell you NEW USES for Rubber Bands

**F**ACTORIES, offices, banks, vegetable growers, drug stores, department stores, newspapers, toy manufacturers all find B. F. Goodrich rubber bands helpful in assembling, sorting, storing, coding. They may save you time and money, too.

Do you know how many styles, sizes, colors rubber bands are made in? How special bands can be made for your special jobs? We can tell you ways rubber bands can be used to speed up your work. For full information and size chart write Dept. 0110, The B. F. Goodrich Company, Akron, Ohio.

## B.F. Goodrich

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BUSINESS FORMS



We design and print forms to solve every business problem. Prompt service, attractive prices.

#### Other Federal Specialties

Multiple carbon forms . . . carbon-interleaved statements . . . voucher and payroll checks . . . forms requiring spot carbon or die-cut carbon . . . business machine forms

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PRINTERS OF BUSINESS FORMS SINCE 1926

lem of finding adequate terminology for whole classes of new products.

The first synthetic fiber to go on the market was viscose, which began to be sold in any quantity in this country back around 1911. At first it was known as "artificial silk" (du Pont's early output came from du Pont Fiber-silk Co.). Then the industry coined the name rayon—from "ray" (because the stuff shone) and "on" (from cotton).

When Celanese came on the market with its acetate product in the early 1920s, rayon was evolving into a generic name for synthetic fabrics. It gradually took over, despite Celanese's efforts to get "Celanese" adopted instead.

• **Closed Door**—In 1937 FTC nailed the door shut. It issued an order putting acetate under the rayon umbrella. Ever since then the industry has been trying to get FTC to change the ruling.

On this point the industry has a tendency to criticize Celanese Corp. Some people think that the issue might have been settled a lot sooner had the company not insisted so strongly on pushing its own name forward.

• **Redeal**—Finally, as a result of pressure from Celanese and the rest of the industry, FTC reopened the question about a year ago. Formal talks with industry began in the fall. The new rules that appeared last week are the result of these efforts. Now the only thing that really disturbs anyone is the name finally picked. Acetate, it is widely agreed, is a harsh, metallic name that doesn't go very well with a fabric.

Months ago Celanese began working on its public information program to make the word acceptable—and understood—by trade and public. Celanese describes its program as "the most extensive advertising and promotional campaign ever to appear in the textile industry."

• **Two Goals**—The drive, which makes use of practically every wrinkle known to public relations and advertising, has two major objectives: (1) to make people understand the differences between rayon and acetate, and (2) to get across the idea that acetate is the "luxury fiber." In short, as Celanese puts it to the trade, the idea is "to cash in on the FTC ruling." In doing this, Celanese is subordinating its own name to build up the generic name of acetate.

Celanese has left no stone unturned. It made consumer and trade studies to find out what people did and didn't know about acetate. On the basis of what it learned, Celanese developed a program that included:

• **Retail training.** Celanese is sending out information folders to some 25,000 retail employees in larger stores (over \$1-million volume). In top stores it will hold meetings, some 235 in all.

• **Informative tags.** The company has developed a series of tags to attach to garments made of acetate or of acetate and other fibers. They tell what's in the garment, how to clean and iron it. Celanese will give these to the industry free. (Imprints will be provided at cost.)

• **Advertising.** Celanese has worked out heavy advertising campaigns, both trade and consumer. The consumer campaign is now appearing in 19 national consumer magazines and television. It has two copy slants, one institutional, the other playing up specific lines of fashion goods (Handmacher suits, Anne Fogarty dresses).

• **Consumer books.** Celanese will distribute some 12-million books through women's clubs telling the qualities of acetate and how to wash and iron it.

Other synthetic fiber makers are watching the program with interest. But so far they have made no move to emulate Celanese. Du Pont and American Viscose, for example, do make acetate. But their big production is in viscose. As a result, neither of these companies sees any particular problems so far as they are concerned.

• **New Rivals**—Some observers figure that Celanese has a worrisomely large stake in the future of acetate, considering the new "wonder" fibers—like Orlon and Dynel—that are coming along.

But Celanese has plans of its own for acetate. More and more it will stress the blending of acetate with rayon and other fibers to produce fabrics with the better qualities of all their components.

## MARKETING BRIEFS

The profit ratio of department and specialty stores was a sad 1.4% for the first three quarters of 1951—compared with 2.9% for the same 1950 period—says National Retail Dry Goods Assn.

• Macy's sales for the 13 weeks ended Oct. 27, 1951, were down slightly from the same quarter of 1950. Earnings dropped from \$1.39 to 55¢ a share of common stock.

• Conspiracy charges by the Federal Trade Commission against National Retail Furniture Assn., American Retail Federation, and others went down the drain last week. The six-year-old charge accused the associations of getting together to prevent wholesale buying by employees from the stores where they work.

• Corpus Christi, Tex., gets Federated's fifth—and biggest—new Fedway store (BW—Nov. 3 '51, p128).

Take it from one who knows—

# GREETINGS by Telegram



**WESTERN  
UNION**  
anywhere

*ADD REAL CHEER  
TO THE HOLIDAYS!*

## "Happiness Headquarters"

at holiday time is your nearest Western Union Office. People are adding this personal touch in messages to friends—relatives—business associates. Easy to send—thrilling to receive! Beautiful forms frame Christmas and New Year's Greetings with the warm spirit of the season.



So Convenient! Just as easy to send one or a hundred. Give us your list of names and addresses along with your message. We do the rest!



Send Season's Greetings Anywhere Overseas



## SANTAGRAMS—Dated: North Pole

Signed by Santa—A special thrill to any child's Christmas dreams. Give them to Western Union now for pre-Christmas delivery.



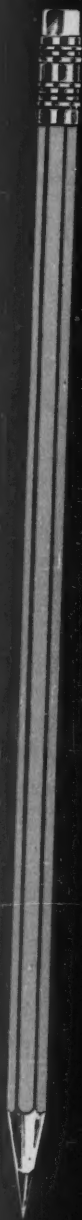
## BEST GIFT OF ALL

Many people prefer to have gifts of their own choice. Telegraphic Gift Money Orders by Western Union, on special gift blanks, give them that pleasure. Available at any Western Union office—right up to Christmas Day. Include a personal greeting for only a few cents extra.

Telegrams cost you less now—40% Excise Tax cut and liberal new rates.

# WESTERN UNION

Stop at your near-by Western Union office or call Western Union and have telegrams charged to your phone.





## **35 MILES FOR A NICKEL . . .**

What's it made of? Wood and graphite, obviously . . . but to have a complete list you'd have to jot down at least 25 materials. And, under "How?" your list would contain some 150 separate operations and almost a hundred laboratory and factory tests. Yet a nickel gets you a good lead pencil which will draw a line more than 35 miles long.

## **HOW DO THEY DO IT? . . .**

Principally through cooperation. For the finished product embodies the skills of those who work with mind and muscle in mines and mills, forests and factories. Thousands have worked . . . that millions might benefit.

## **AMERICA WORKS LIKE THAT . . .**

America didn't invent the string-wrapped stick of graphite that once served as a writing instrument. But American ingenuity took an old world luxury; developed it into a dime-store bargain . . . and built a 30 million dollar business.

America can work like that because it has an all-seeing, all-hearing and reporting Inter-Communications System.

## **THE AMERICAN INTER-COM SYSTEM . . .**

Complete communication is the function, the unique contribution of the American business press . . . a great group of specially edited magazines devoted to the specialized work areas of men who want to manage better, design better, manufacture better, research better, sell better.

## **WHY WE HAPPEN TO KNOW . . .**

The McGraw-Hill business publications are a part of this American Inter-Com System.

As publishers, we know the consuming insistence of editors on analyzing, interpreting and reporting worth-while ideas.

As publishers, we know that advertisers use our business magazines to feature the products and services which they offer in the interest of increased efficiency, and lower production costs.

As publishers, we know that people subscribe to our business publications to keep abreast of what's new in their field and in industry as a whole. For the editorial pages tell "how" and the advertising pages tell, "with what."

As publishers, we make the advertising pages of our business publications available for your communications with the people who make up your markets.

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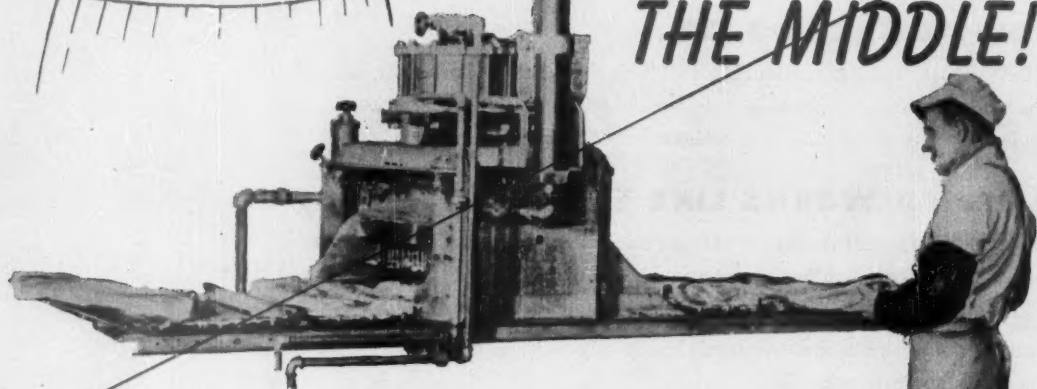
HEADQUARTERS FOR BUSINESS INFORMATION





**NOW THEY PUT**

**THE PICKLE IN  
THE MIDDLE!**



... and **BACON** joins the growing list of engineered food products

They put the pickle in the middle of the bacon now, and suddenly a centuries-old method of curing meats is becoming obsolete. Bacon has always been salt-cured by soaking for nearly three weeks in big vats of brine, or "pickle." But, recently, a meat packer got an idea—a food-engineering idea: Why not needle the pickle into the bacon and stop wasting time and labor? Here's the result: a machine that jabs 101 "hypodermics" into each slab of bacon passing on a conveyor. It cuts the cure to 24 hours . . . makes quality uniform, cuts costs, streamlines production.

#### Again . . . a new gimmick breaks a bottleneck

When a new gimmick breaks a bottleneck, another product is ready for *food engineering*. Ingredients, packages, handling methods—all may need up-dating. New plants may be needed. Equipment long used in, for example, dairy plants becomes suddenly essential to a baker, a brewer, or a canner . . . That's typical of progress in food plants . . . which buy 1/7 of ALL new manufacturing plant and equipment,

plus \$20 billion worth of materials, parts, containers, and supplies each year.

#### Food engineering . . . common denominator

If a quick cure for bacon means so much, get the Big Picture: *food engineering* sweeping away the costly hand methods that made canning, baking, brewing, meat

packing, dairying, etc., inefficient arts only 30 years ago.

Food plants know food engineering is the common denominator of progress. That's why they have tripled the paid circulation of **FOOD ENGINEERING** since 1940. For in its pages they find competent, thorough coverage of new twists in engineering the products, premises, processes, and physical distribution of *all* food plants. That's why, time after time, **FOOD ENGINEERING** tops the industry-wide readership studies (the latest, by Crossley Incorporated).

And, year after year, **FOOD ENGINEERING** carries more advertising than any competitor covering the big food industry.

What's your market in food plants? Send today for **FOOD ENGINEERING**'s instructive 1952 Market and Media File.



**We hit your  
sales target!**

**FOOD**

A MCGRAW-HILL PUBLICATION  
330 W. 42nd Street, New York 36, N. Y.

*Common denominator of the food industry*

ABC-ADP

## Population: 1950 vs. 1940



## U.S. Moves West and to the Suburbs

Rural population . . . . .	Up 7.4%
Population inside cities . . . . .	Up 11%
Population in the suburbs . . . . .	Up 37%

The U.S. habit of moving around, born some 300 years ago, dies hard. It probably won't die at all so long as some parts of the country look better than others—and so long as people are free to go there. It's a good habit from the viewpoint of the over-all economy, but it keeps the businessman jumping. If his market takes to the road, he has to go along.

• **Old Story**—The 1950 Census nailed down in fresh statistics two dominant facts that we have more or less known for some time:

• The westward trek is stronger than ever.

• The rush to the suburbs approaches traffic-jam dimensions.

The map above tells part of the story. Every section of the country shared in the population boom of the '40s (BW—Dec. 8 '51, p146), but the Far West ran away with the race. Its percentage of increase—nearly 49%—was three times as great as that of its nearest competitor, the Southwest. The other figures on the map show only that the rest of the country moved ahead in a more leisurely fashion.

That still leaves the great weight of the population where it always has been. New England, the Northeastern and Central areas still account for over half the population—with the biggest

slice (26.5%) in the central region.

• **The Levelers**—Economics and the natural desire of man to enjoy himself both seem to be upsetting the top-heavy, lopsided population of the past. What we are getting now is a broader concentration of people all along the inland and coastal waters. New England and the Atlantic seaboard areas have been pretty well filled up for some time. The regions around the Great Lakes have also had their share. Now the Pacific states are having their turn.

In sizing up growth, there is a complication. Any region's growth is affected by two factors: how many people come into it, and how many babies both the old and the new residents have. The Southeast is a good example. All the states in this region except Florida and Virginia lost by migration in the years 1940-1950. Yet the map shows a total increase of 12.5%. There's an easy, two-pronged answer: (1) Florida grew 30% by immigration; and (2) the Southeast as a whole had the greatest natural increase of the whole U.S.

### I. Away From the Farm

If you forget for a moment what newborn population has done to boost population, you see several main tides of movement. They are not new ones, but

they have developed some interesting new aspects.

• **Southern Accent**—For nearly a hundred years, the South has been the heaviest loser by migration. But until 1930 the exodus from the South—in large part Negro—was mainly northward. Alongside this South-North wave is another, even older—the pull to the West.

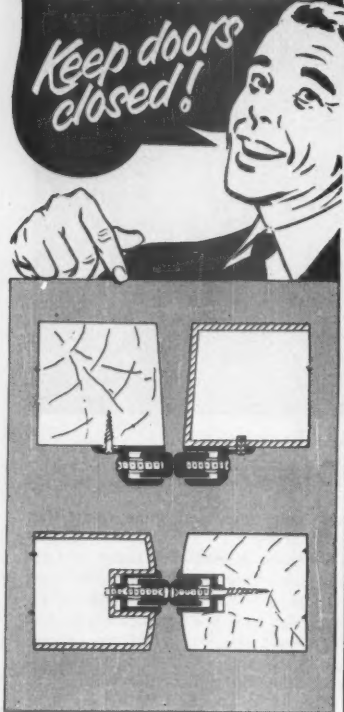
Right here you find something new. Through 1930 the westward caravans were chiefly white people. Beginning with the 1940 census, the Negro began noticeably to change his goal. And between 1940 and 1950 that change took a big leap. The Negro population of the West jumped 237% in that decade. Against that growth, the Negro population of the Northeast increased only 44%; of the North Central, 50%. In the South it grew only 3%.

• **Greener Pastures**—The southeasterners take the prize for wanderlust in the last 10 years. But they weren't the only movers. The Census Bureau points to other areas that clearly lost by migration. For the most part, they are the great, sparse regions of the Northwest—the Dakotas, Nebraska, Oklahoma, Kansas.

In short, the figures underscore a story we have heard for a long time: the long-term exodus from the farm. In nearly every case, the state that lost population between 1940 and 1950 through migration was an agricultural state. The farm population dropped roughly 16% in those 10 years. And it's still going down; in 1951 it is nearly 20% below the 1940 figure. (If you

# MICHAELS adjustable ASTRAGALS

Keep doors  
closed!



Write today for information and prices on Michaels Adjustable Astragals. Made of extruded bronze, aluminum or nickel, they are simple, practical, rugged, easily installed and adjusted, and available in several styles. Two are shown above. Type A (top illustration) may be applied to either wood or hollow metal bevel doors. Also used as a stop bead. Type E (lower illustration) is for bullnose hollow metal or wood double acting doors. Both types may be used at the bottom of doors. Michaels Astragals help keep doors closed tightly... eliminate drafts and air currents... keep out dirt and dust. Write for details.

## OTHER MICHAELS PRODUCTS:

Bank Screens and Partitions	Stair Railings (cast and wrought)
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Elevator Doors	Grilles and Wickets
Store Fronts	Kick and Push Plates
Lettering	Push Bars
Check Desks (standing and wall)	Cast Thresholds
Lamp Standards	Extruded Thresholds
Morques	MI-CO Parking Meters
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Home Plates	

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Manufacturers since 1870 of many products in bronze, aluminum and other metals

count in small town dwellers, "rural" population rose 7.4%.)

• **For Better Jobs**—Here again we run into the familiar problem of economic pressure. People pick up and leave their homes mainly to find work or to get better work. They move to the areas that promise the most in income. And while farm income has shot up like magic in the past 10 years, farm work is still the least rewarding on a per capita basis.

In every case, those regions that had per capita incomes above the national average in 1940 gained from migration over the last decade—New England, the Middle East, the Far West, and the Central states. On the other hand, the three regions whose per capita income in 1940 was below the national average—the Northwest (the Great Plains), the Southwest, and the Southeast—lost by migration. The reason they don't show a net drop in total population is that rural areas are pretty consistently the ones with the greatest natural increase.

• **Market Shifts**—Obviously, all this movement is of vital interest to the marketing man. An area from which the population is moving out isn't going to need much in the way of construction; areas to which people are moving are going to. Along with construction goes all the equipment that home builders will need—and all the paraphernalia that new families will require.

But there's something worth watching even in those regions that are losing people by migration. For those low-income regions that were the heaviest losers were the biggest percentage gainers in per capita income. The great levers in the case were, of course, World War II and the postwar boom.

• **War Industry Factor**—The war did more than set up huge industrial plants on the Pacific Coast and in the Southwest. Because those plants meant work and good pay, they built up the economy directly. But the great new concentrations of industry made an indirect contribution, too. It's easy to move in this country. And an area that has a California, where incomes are traditionally high, for a neighbor must try to meet the competition if it wants to hang onto workers. So the Southwest, which in 1940 had the second lowest per capita income (second only to the Southeast), stepped up its income by the highest rate of all—206%. Thanks to the increase in farm income, the Northwest, also way down the list in per capita income, racked up the second biggest increase. The Southeast stood third.

New England, on the other hand, with a high income to start with, made the lowest percentage gain of all—115%.

In high-cost regions, like New England, industry has shown a marked tendency to eye with envy the cheaper

labor market of less industrialized areas. The low incomes that sent individuals scurrying off to greener fields sent companies into the low-income areas. And industry builds up a market, just as individuals do.

That same reasoning, one expert suggests, may even sober up the West's forward rush. If a company isn't willing to meet the highest income scale of all the regions, it would do well to look somewhere else.

• **The Stakes**—The problem seems to boil down to this: Is it better to bank on a market that shows the fastest growth even though it is still small and poor by national standards? Or is it better to stick with the rich, highly developed areas—New England, the Middle East, and the Central states—whose growth in both population and income has slowed down?

By one gauge, retail sales, the slower growers still look strong. In 1948, says the Office of Business Economics, the Central and Middle East states together accounted for close to 54% of the nation's retail sales. But the fast growing, fast urbanizing South came third, with nearly 15%. The Far West accounted for 11.5%.

No area, however, likes to lose people—the vital factor in any market. The Federal Reserve Bank of Minneapolis, in its latest monthly review, looks with concern at the dwindling population.

## II. Into the Suburbs

The second great change that the Census pointed up—and continues to point up as it digests more of the huge amount of data in its books—is that the rural American is the vanishing American. A few weeks ago the Census summed up its findings: Nearly two-thirds of the entire nation is urban.

That in itself is hardly news. But just as long-range migration is altering the broad face of the marketing field, so short-range migration is changing the face of the cities. The central cities are losing the struggle to hold their own against the exodus to the suburbs.

• **Trickle to Torrent**—Long-distance movers tend to crowd into the hearts of urban areas; but city dwellers are moving out to the fringes faster than the newcomers move in. Almost three-fourths of the urban population in 1950 was hugging the edges of 157 "urbanized areas" around central cities of 50,000 or more. As the National Industrial Conference Board summed it up recently, "The flow of population into the outskirts of metropolitan cities has changed from a trickle to a torrent." In the 32 biggest city areas, the increases between 1940 and 1950 stacked up this way: inside the city, 11%; in the suburbs, 37%. For individual cities, the increase ranged from 150% for



# MAGNESIUM

## *and the problem of WEIGHT*



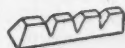
*in your  
product*

From designer's board to customer's hands, weight in your product may be expensive. Weight enters into the cost of the raw material. Weight determines production methods and machinery requirements. It enters into the cost of labor and the cost of transportation. And in many products, extra weight is a costly penalty in sales results. Weight, wherever it is found, costs money.

Now, consider magnesium. Here is the world's lightest structural metal. Its weight is nearly 75% less than that of steel . . . 33% less than

aluminum. Wherever design is based on weight limitations, this lightness permits the use of thicker, more rigid sections without a weight penalty. In thousands of applications, magnesium has permitted better design, better performance, more payload, and at the same time decreased costly weight.

In redesigning your product for tomorrow's market, plan with magnesium, the world's lightest structural metal, a standard material wherever light weight is important.



*This Little "Pig" Was Drafted...*

Today, magnesium like many other metals, is a tremendously important part of our defense effort, particularly where light weight is a specification in design. But tomorrow, magnesium promises new horizons in the field of metal supply. The seas, at our own shores, can provide 100,000,000 tons of magnesium per year for a million years without significantly reducing the supply!

### **THE DOW CHEMICAL COMPANY Magnesium Department • Midland, Michigan**

New York • Boston • Philadelphia • Washington • Atlanta • Cleveland • Detroit • Chicago • St. Louis  
Houston • San Francisco • Los Angeles • Seattle • Dow Chemical of Canada, Limited, Toronto, Canada

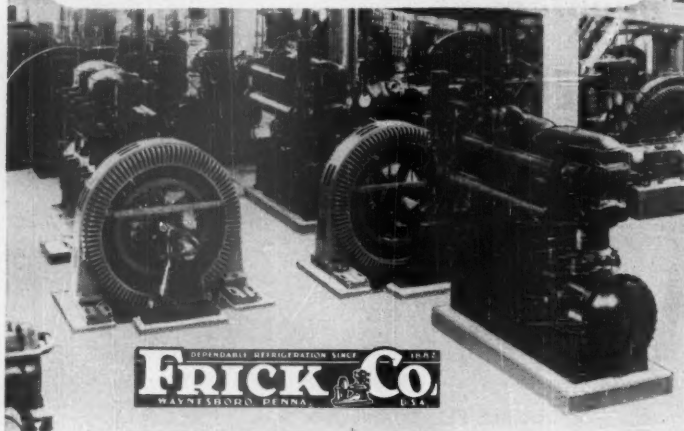


## Celanese Corp. Uses 6420 Horsepower of Frick Refrigeration

Fourteen Frick refrigerating machines are in operation at the Amcelle plant of Celanese Corporation of America, near Cumberland, Md., makers of chemical yarns. Most of these ammonia compressors have been in use since 1929. The motors driving the new vertical machines, shown in the foreground, are each of 1250 hp.

This is a large-scale example of the dependability and economy of Frick ammonia refrigeration. Power requirements, when operating in summer weather on air conditioning loads, are only 0.70 hp. per ton of refrigeration.

The really important jobs, whether for air conditioning, ice making, or other commercial cooling work, call for FRICK refrigeration.



DEPENDABLE REFRIGERATION SINCE 1842  
**FRICK CO.**  
WAYNESBORO, PENNA. U.S.A.

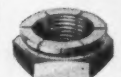
## FLEXLOC THROUGH THE AGES - No. 1

IT WON'T HAPPEN AGAIN, BEN—  
WE'RE USING FLEXLOC  
SELF-LOCKING NUTS...  
THEY WON'T WORK LOOSE!

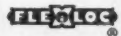
AN EXCITING MOMENT AT THE CIRCUS  
MAXIMUS WHEN THE LOCAL FAVORITE  
MAKES AN UNSCHEDULED PIT-STOP.



**FLEXLOC**  
Self-Locking Nut,  
"regular" type.



**FLEXLOC**  
Self-Locking Nut,  
"thin" type.



**SELF  
LOCKING  
NUTS**

**SPS** STANDARD PRESSED STEEL CO.

JENKINTOWN 57, PENNSYLVANIA

"Half-a-century of PRECISION FASTENERS"

San Diego to 9% for Pittsburgh. In Houston alone, of this group, the central city gained more than its suburbs.

• **The New Market**—There's one difference between the long-distance travelers and the short-jumpers. The state-to-state movers are mostly young and single. The city-to-suburb movers are also young, but they are married and have young children. That means the field is wide open for anyone who is in the business of supplying consumer goods or services. (In this connection, it is interesting that the over-all growth of services is greater than of manufactures.) Small retailers as well as large chains are flocking to the suburbs. That's what Federated Department Stores had in mind when it planned its new chain (BW—Nov. 3 '51, p125).

It affects manufacturers, too. People who live in the suburbs wear different types of clothes than people in the cities. They need automobiles more. And they want things the city dweller never bothered with—garden equipment and the like.

Even industry is in on the move to the suburbs. Atlanta exuberantly last fall reported that its industries and wholesalers were outward bound.

• **Pattern Is Set**—Looking ahead, the experts cautiously predict that the big interregional population movements will probably keep pretty well to the pattern of the '40s. The gainers will still gain, the losers will lose more. After 1960, according to Census Bureau projections, the lines will tend to flatten out.

On the move to the suburbs, it may be that the droop in the current teen-age drop will slow down the trend in the next few years. But so far there is no sign that it is coming to a halt. Americans seem to be settling for an urban civilization. At the same time they are running true to form: They apparently like their urbanization better when it comes with a little fresh air.

## REPRINTS AVAILABLE

Single copies of this article, combined with "Who Are Tomorrow's Customers?" (BW—Dec. 8 '51, p146) will be available in about three weeks to **BUSINESS WEEK** subscribers upon request without charge. Other copies will be billed at the following rates: 1 to 10 copies, 20¢ each; 11-100 copies, 16¢; 101-1,000 copies, 12¢; over 1,000, 10¢. Address orders for reprints to Readers Service Department, Business Week, 330 West 42nd Street, New York 18.

# What's your stake in adequate railroad revenue?

*Because railroad service is vital to the life and progress of the nation and everyone in it, you have a real stake in railroad health and prosperity. That's why America's railroads feel that you will want to know about their need for more revenue—to enable them to keep on meeting your transportation needs and those of the nation.*

**It takes money** to keep up tracks and buildings and signals . . . to keep cars and engines in running condition . . . to operate trains and turn out transportation service.

**It takes still more money** to buy new cars and locomotives, lay heavier rail, install improved signals, build better shops, and make all the other improvements necessary to keep pace with national transportation needs.

Since the end of 1945, the railroads have spent an average of more than a billion dollars a year on improvements alone — including more than 400,000 new freight cars and 13,000 new locomotive units.

But still more is needed — and since fighting began in Korea the railroads have ordered 200,000 freight cars and more than 5,000 new units of locomotive power.

In part this has been — and is being — financed

through installment buying of cars and locomotives; in part, through drawing on the working capital of the railroads.

But this working capital has now been diminished to where the railroads have in their treasuries only a little more than enough to cover current cash expenditures for one-half of one month.

National needs of commerce and defense require that expansion and improvement of facilities *must* go on. To meet the expenditures necessary, the railroads can no longer rely on reserves. They must depend on the kind of financing which can be supported only by earnings more nearly adequate than in 1951.

Such earnings — needed to sustain the credit without which the railroads could not continue their vital program of building to meet transportation demands — can come only from freight rates based on current costs.

## Association of American Railroads

*Transportation Building, Washington 6, D. C.*

# FINANCE

THE POSTWAR PATTERN OF  
LIFE COMPANY INVESTMENTS:

Out of governments, into corporate  
securities and mortgages

December 31,	1946	1947	1948	1949	1950	*1951						
	Amount	% of Total	Amount	% of Total	Amount	% of Total	Amount	% of Total	Amount	% of Total		
<b>BONDS</b>												
U.S. Govt.	\$21,629	44.9%	\$20,021	38.7%	\$16,746	30.2%	\$15,291	25.6%	\$13,459	21.0%	\$11,050	16.1%
Municipal	614	1.3	609	1.2	872	1.6	1,052	1.8	1,152	1.8	1,200	1.8
For. Govt. #	1,332	2.7	1,373	2.6	1,467	2.6	1,470	2.4	1,455	2.3	1,525	2.2
Tot. Govt.	23,575	48.9	22,003	42.5	19,085	34.4	17,813	29.8	16,066	25.1	13,775	20.1
Railroad	2,872	6.0	2,844	5.5	3,002	5.4	3,017	5.1	3,187	5.0	3,275	4.8
Pub. Util.	5,587	11.6	6,941	13.4	8,741	15.7	9,764	16.4	10,587	16.5	11,200	16.4
Ind. & Misc.	3,316	6.9	4,969	9.6	7,151	12.9	8,680	14.6	9,526	14.9	11,500	16.8
Tot. Corp.	11,775	24.5	14,754	28.5	18,894	34.0	21,461	36.1	23,300	36.4	25,975	38.0
<b>STOCKS</b>												
Railroad	1,249	2.6	1,390	2.7	99	0.2	128	0.2	128	0.2	125	0.2
Pub. Util.					372	0.7	513	0.9	672	1.1	750	1.1
All Others					957	1.7	1,107	1.8	1,303	2.0	1,475	2.1
Total ...	1,249	2.6	1,390	2.7	1,428	2.6	1,718	2.9	2,103	3.3	2,350	3.4
<b>MORTGAGES</b>												
Farm ...	795	1.6	895	1.7	990	1.8	1,138	1.9	1,327	2.0	1,525	2.2
Nonfarm	6,360	13.2	7,780	15.1	9,843	17.7	11,768	19.7	14,775	23.1	17,950	26.2
Total ...	7,155	14.8	8,675	16.8	10,833	19.5	12,906	21.6	16,102	25.1	19,475	28.4
<b>OTHER INVESTMENTS</b>												
Real Estate	735	1.5	860	1.7	1,055	1.9	1,247	2.1	1,445	2.2	1,650	2.4
Policy Loans	1,894	3.9	1,937	3.7	2,057	3.7	2,240	3.8	2,413	3.8	2,600	3.8
Cash & Misc.	1,808	3.8	2,124	4.1	2,160	3.9	2,245	3.8	2,591	4.1	2,675	3.9
Total Admit.												
Assets	\$48,191		\$51,743		\$55,512		\$59,630		\$64,020		\$68,500	

N.B. All figures are in millions of dollars. \*Estimated. # Largely Canadian.

Data: Institute of Life Insurance and Life Insurance Assn. of America.

BUSINESS WEEK

## Insurers: More Money, Less Leeway

For the first time since 1942, sales of new life insurance policies this year won't exceed those in the previous 12-month period. When all returns are in, they are expected to add up to only about \$28.8-billion, some 6% under 1950's record-breaking volume.

The picture is quite different for the assets of the life trade—the world's largest nongovernmental reservoir of investment funds. Assets are still rocketing upward at a fantastic pace.

• **Resources**—Here's the picture, according to "official" estimates presented last week at the 45th annual meeting of the Life Insurance Assn. of America in New York:

This year resources of the life insurance companies appear headed for a rise of some \$4.5-billion—biggest 12-month hike on record. The 1951 year-end is expected to see total assets add up to \$68.5-billion, a bedazzling all-time peak.

The trade's rate of return on investment seems certain to show similar improvement. The rate has climbed persistently since it hit an all-time low of 2.88% in 1947. By 1950 it had reached 3.09%. And this year—though "official" estimates are not yet available—many authorities wouldn't be surprised to see it jump close to 3.20%, the highest rate on record since 1943.

• **Money Rates**—A primary reason for such hopes is the steady climb of money rates ever since last spring when the Federal Reserve Board decided to drop its long-maintained support of government bond prices and let such issues find their proper level in a "free" market.

It's not the only reason by a long shot. The table above shows the great changes wrought in the life trade's investment portfolio since World War II. These changes have contributed significantly to the earnings record.

Low-yielding, long-term Treasury obligations no longer make up the bulk of investments. Since V-J Day life companies have been sellers rather than buyers of such issues. And they have been investing most of the proceeds from the sales, along with nearly all their new-money receipts, in much higher-yielding corporate securities and mortgages.

By the year-end holdings of U.S. governments are not expected to go much over \$11-billion, or 16% of all resources. Five years ago such investments added up to \$21.6-billion and accounted for close to 45% of all assets.

Corporate bond holdings, on the other hand, have more than doubled in the same period. They're expected to be close to \$26-billion, accounting for 38% of all assets. Equivalent figures in 1946 were \$11.8-billion and 24.5%.

• **Mortgages**—Dollarwise, the trade's mortgage investments have risen almost



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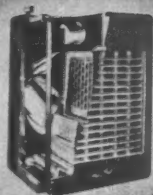


\*3,865,000 average single-copy sales per issue  
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CONSTRUCTION

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as fast. They have jumped from some \$7.2-billion five years ago to almost \$19.5-billion and comprise 24.8% of all resources, as against 14.8%.

The drastic switch isn't at all surprising. History shows that the size of the life trade's government holdings is determined by whether the nation is going through a period of strain caused by war or depression or is enjoying at least a surface peace and quiet.

The life companies have always been big buyers of government bonds when the offerings have been heavy. When these periods end, it has always been their practice to peddle the governments to others and return to their normal concentrating on the capital needs of business, industry, and other civilian segments of the economy.

• **Overzealous?**—Some people appear to think that the life companies have been displaying more enthusiasm than they should in switching from governments to more lucrative holdings.

Last week Allan Sproul, president of the New York Federal Reserve Bank, chided members of the association for the way they dumped governments while the FRB was supporting the market. He agreed that the trade had come out of World War II with "an overbalanced portfolio position in government issues," but added that the selling methods of "many of you gave the impression of feeling that you had the Federal Reserve System over a barrel and could whack it at will."

The trade, he said, "might have been expected not to try to unload long-term securities in chunks of 5-, 10-, 15-, 20-million, or more on short notice whenever you wished. Such shifts in holdings... require time and marketing." Sproul saw in the way some offerings were marketed the suggestion that sellers were taking advantage of the FRB "to continue with safety, drawing long-term rates of interest on what were being treated as short-term investments."

• **Good Reasons**—Whether the rebuke is merited, of course, depends on where you sit. But there is no question on one point: There were some very cogent reasons for the trade's switch out of so much of its once huge holdings of government bonds.

Dire need to increase its average return hasn't been the only reason. The demands made by would-be borrowers have played a larger part. It just couldn't have met the calls if it had kept its government holdings in its vaults and had portioned out only its new-money receipts among borrowers knocking on its doors.

Because it didn't adopt such measures, it can now boast of a major contribution towards easing the postwar housing shortage; it absorbed un-

precedented billions of new mortgages. And it can point to the job it has done in preventing an even worse inflation through additional billions in loans to expand the nation's productive capacity.

• **In Balance**—From here on, however, there will be little further liquidation of the life companies' government holdings. Most trade observers believe they are "reaching a point of portfolio balance." What's more, there's a natural reluctance to disturb long-term governments now that they are unpegged and selling at a discount.

It's an unhappy omen for would-be borrowers that the life companies can no longer count on converting government bonds. The lending ability of the trade is going to be sharply lower than it has been from here on.

• **Lending Plans**—The forward commitments of the trade must also be considered. Last April 45 life companies, accounting for about 85% of all the assets of the trade, reported agreements to lend some \$4.5-billion of their future investible funds. The breakdown was \$1.7-billion for mortgages, \$2-billion to commercial and industrial companies, and \$709-million to railroads, public utilities, and state, county, and municipal borrowers.

At the end of October \$4-billion of these commitments were still outstanding. About 62% of this was expected to be drawn down within six months.

It's thus not surprising that at last week's meeting Dr. James J. O'Leary, the association's director of investment research, could cheerfully report that "the life insurance companies will probably find little difficulty in investing their funds at attractive yields in 1952."

It's cold comfort, though, to many companies that may have been thinking of borrowing insurance money next year. Some may well have to look elsewhere. If the recent loan demand doesn't ease up sharply in the next six months or so—and few at the moment expect that it will—the life insurance trade won't be able to satisfy all the calls on it.

• **Group Policies**—There's one ray of hope. Next year new insurance sales may boom as never before. Here's why:

The sole reason for the 1951 drop was the sharp decline in group insurance. Both life and industrial insurance sales were up 2%. Group sales fell off 22% for what may well prove to be an only temporary reason: the inability of the Economic Stabilization Administration to decide on employee welfare benefits under wage and salary stabilization orders.

According to Bruce Shepherd, association manager, "while this impasse has not yet been broken... there is presently hope that it will not be much longer delayed."

# Scaife research

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The pressure vessels and deep-drawn shapes being made today in the Scaife factory are *better* because of scientific research in Scaife Laboratories. For example, the development of the new Scaife Dura-Lite LP-Gas Cylinder included a complete study of the deep-drawing process, using half-size parts made on the research department press shown above. This procedure, supplemented by complete metallurgical, physical, chemical and specialized studies, permits accurate evaluation of various materials, drawing methods and processing procedure. The result is a better, more serviceable product designed and made on sound engineering principles.

## SCAIFE COMPANY

OAKMONT (Pittsburgh District), PENNA.

Makers of Pressure Vessels  
for Air, Gases and Liquids



Here is the "big brother" of the press shown at the top of the page. Full-size cylinder-half has been formed in one stroke of the press (see right) and is being removed for processing and assembly.

Starting with a circular sheet of steel—

a cup is formed by a conventional drawing operation.

A continuation of this pressing operation turns the cup "inside out" without removing it from the dies,

completing—in a single stroke—the deep-drawn shape, which becomes a cylinder-half. Shown below is the complete cylinder, a standard container for liquefied petroleum gas. Similar Scaife cylinders are used for freon, acetylene and other materials.



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## First National Unbends . . .

. . . but only a trifle. In a surprise move that combined a stock dividend with a cut in cash dividends, it has set the stage for more lending to corporations.

Last week New York's conservative old First National Bank joined the parade to obtain wider distribution of its shares. It plans to give stockholders two additional shares for each share they own. At the same time Alexander C. Nagle, president, indicated that the bank would soon give up its practice of dipping into capital funds in order to maintain the dividend rate. Starting in April quarterly dividends would be the equivalent of \$15 a share on the present stock. The current quarterly rate is \$20.

• **More to Come?**—Observers around Wall Street wonder whether these changes in policy foreshadow any further moves. First National, with its ultraconservative ratio of \$1 in capital funds for every \$5.40 in deposits, could conceivably use some of those capital funds to buy out stockholders of some other bank and thus increase its earning assets.

It could, but people who know First National well doubt that it has any such plan in mind. However, they think it intends to go after corporate customers more aggressively.

• **Comes High**—First National stock sells at around \$1,200 a share, which makes it by far the most expensive stock of any of the big New York banks.

If two-thirds of the stockholders approve at the annual meeting on Jan. 8, First National will declare a 200% stock dividend. After the dividend, there will be 300,000 shares outstanding, instead of 100,000. Present par value of \$100 a share won't change. That means the bank's capital will jump from \$10-million to \$30-million. The extra \$20-million will come out of undivided profits. It's just a shuffle in capital funds: Total capital funds, which include capital, surplus, and undivided profits, will stay the same. That's \$141.7-million, according to the Sept. 28 balance sheet.

• **Bigger Loans**—The most important effect of this shuffle will be that First National can make larger loans. A national bank can't loan one borrower more than an amount equal to 10% of its capital and surplus. At present First National's capital and surplus are \$100-million, so the loan limit is \$11-million. The addition of \$20-million to capital will boost the loan limit to \$13-million. That should help First National in going after corporate business. It should also increase its earnings by

permitting it to take larger pieces of big term loans, which typically are shared by a number of banks.

Of course, another effect of the stock dividend will be to broaden the market for the shares. The new price, around \$400 on the current basis, should please anyone who is interested in selling or buying the stock.

• **Shocking**—A number of Wall Streeters have pointed out that the coincidence of announcing a stock dividend along with a cut in the cash dividend is apparently designed to make the dividend cut more palatable. First National people deny this emphatically. They say the stock dividend had been under consideration for a long time.

However, the dividend cut was something of a shock to Wall Street. No company, particularly a bank, likes to lower dividends. Since 1946 First National's net operating earnings have run below the \$80 annual rate. In 1947 and 1948 First National's per-share operating earnings were \$78.67 and \$77.25, respectively. But in those years it was able to make up the difference out of profits on security sales. Since 1948 net operating earnings have dropped steadily, and First National has had to dip into undistributed profits to maintain the dividend.

• **The Blame**—Some bank-stock analysts have figured First National would keep right on doing this, since it is so well supplied with capital funds. But they got a surprise.

Nagle blamed the dividend cut on the sudden jump in income taxes. He said that net operating earnings, before taxes, are estimated at around \$900,000 above last year. But he figures that income tax payments will be up more than \$1.2-million over last year. The result: Operating earnings, after taxes, will be an estimated \$6.5-million, compared with \$6.9-million in 1950. Security profits and recoveries will be about \$800,000, compared to \$1.5-million last year.

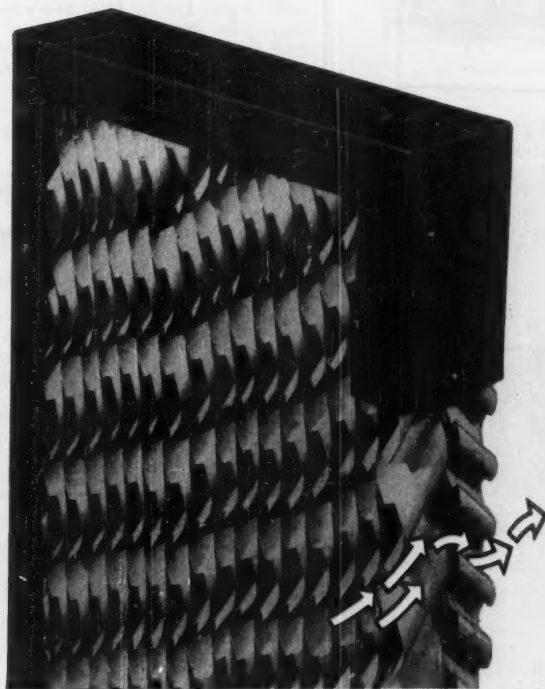
In spite of the fact that it has decided to conserve capital funds, First National isn't likely to use them to acquire a smaller bank or banks. To understand why, you have to know something about the bank's character.

• **Conservative**—It's a compact, low-cost operation, with only about 265 employees. Its management is very likely to prefer to keep it that way. A higher percentage of gross operating earnings comes through to net



# AIR-MAZE CORPORATION ANNOUNCES PURCHASE OF THE DETROIT AIR FILTER COMPANY

*Production of Detroit's DUSTAY® disposable panels  
to be increased to meet growing demand*



Cross-section of the Air-Maze Dustay filter panel showing how air changes direction twice, bringing dust particles in contact with the adhesive-coated cellular channels.

WITH THE ACQUISITION of The Detroit Air Filter Company, Air-Maze—which has previously manufactured only the *permanent* types of filter panels—now offers customers a choice of *disposable* filters as well, thus supplying every filter panel need.

Dustay® filter panels have had outstanding acceptance for warm air furnaces, air conditioning units and ventilating systems because they hold more dirt and last longer than other disposable types. And Air-Maze is stepping up production to meet the growing demand.

#### HOLD MORE DIRT—LAST LONGER

Dustay filters hold more dirt—and last longer—because: (1) they hold more adhesive—over a pound compared to only 3 to 6 ounces for most competitive makes, and (2) their cellular passages permit "depth" of dirt-holding capacity, where other disposable panels rely on surface loading.

The large amount of adhesive stored within the highly-absorbent filter cores makes possible Dustay's remarkable "wick action". As dust adheres to the collecting surfaces it absorbs the adhesive through capillary attraction. The adhesive-laden dust then becomes a medium to collect succeeding particles.

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Air changes its direction of flow upon entering the Dustay filter, then is forced to take a different direction half way through. This creates a scrubbing action which assures thoroughly cleansed air at the outlet.

Air-Maze Dustay filters provide low-cost clean air for both home and industry—in warm air furnaces, air conditioning units and ventilating systems. For full details call your nearby Air-Maze representative or write Air-Maze Corp., Cleveland 5, Ohio.

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"We have gained an average of 25% to 35% better utilization on man-hours as a result of installing industrial trucks for loading, unloading and storage work."



#### STEEL WIRE COMPANY



"With industrial trucks, we have speeded up the flow of materials all through the mill. Results: existing machinery can now be used at fullest capacity, production has increased, product unit-cost is lower."

#### IN ANY INDUSTRY

Powered industrial trucks can help you obtain better production records and increase your workers' productivity. Ask your industrial truck sales engineer for information about case histories in *your* industry.

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operating profit than is the case for any other major U.S. bank.

Just the same First National has fallen behind. One reason why its earnings have declined so consistently is that so much of its earnings used to come from high-coupon government and corporate bonds that have been gradually paid off or refunded at lower rates. First National was not very quick to replace this by increasing its corporate loan business.

The other reason is that First's deposits haven't shown any growth pattern. That's because it used to be pre-eminently a bank that dealt with other banks all over the country, holding their reserves on deposit. The development of the Federal Reserve System shifted a lot of those deposits to the Fed.

• **Consistent**—First isn't likely to try to cure this by acquiring branches to make a play for the little man's business. Its management is trying to raise the earnings of the bank by looking for corporate loans of a type that will be consistent with the bank's conservative tradition and yet earn more than it is getting on its government bonds.

You can see how fast First National has already moved in that direction this year by comparing the Dec. 30, 1950, and Sept. 28, 1951, balance sheets. In the nine months the percentage of First's assets in governments dropped from 39% to about 33%. Its loans increased from 21.6% to about 26.6%. Such figures, based on positions as of a single day, can be misleading. But they do indicate a trend when you compare them with the breakdown of assets as of yearend 1949, when only 17% of First's assets were in loans.

#### FINANCE BRIEFS

Chesapeake & Ohio Ry., the nation's biggest coal-hauling road, has just ordered 149 diesels from the Electro-Motive Division of General Motors. Most of these will be used in freight service. Chessy started using diesels in passenger service last August.

• Savings deposits in New York mutual savings banks climbed more in November than in any other month since January, 1950, according to the state savings bank association. The gain—\$74.8-million—compares with \$21.9-million gain in October, \$59.3-million in November, 1950.

• Interest boost: Three Seattle savings banks have boosted their 2% dividend rate to 2½%. The old rate dates back to 1937.

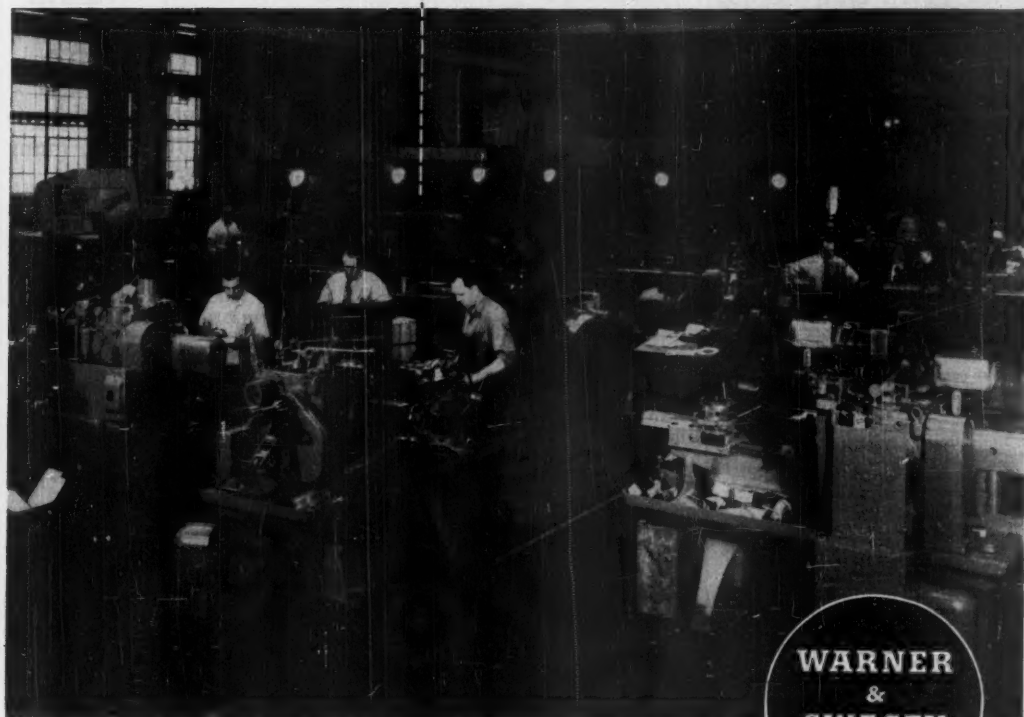
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*But that is not enough!* The final inspector carefully rechecks the completed machine—*proves* beyond doubt that it is ready to turn out the high precision work for which it is designed. Only then does he *sign his name* to a written report certifying that the turret lathe he passes is as perfect as human skill can make it.

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In one plant, one  
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replaced 6 machines  
for cutting, rough-  
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and did the work in  
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Search your plant for this idle metal... work with your local scrap dealer to increase supplies of badly-needed iron and steel scrap.

#### What to look for...

obsolete machines, tools and equipment, no-longer-used jigs and fixtures, worn-out or broken chains, wheels, pulleys, gears, pipe, tanks, drums and abandoned metal structures. Non-ferrous is needed, too!

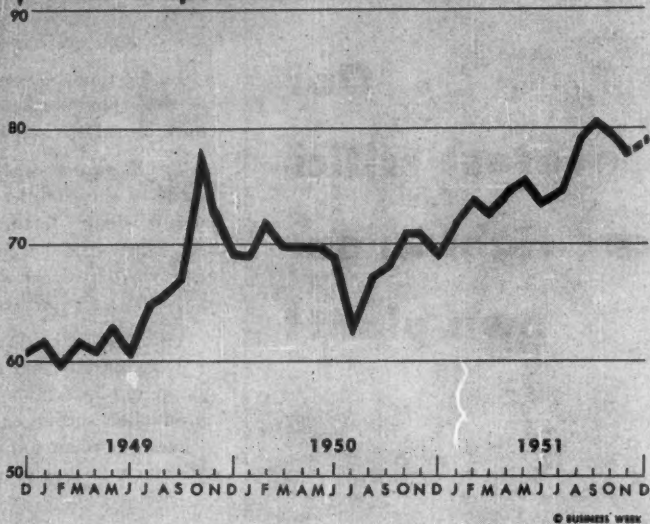


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## THE MARKETS

### Index of Speculative Confidence



## Trading Low; Optimism High

No yearend rally has shown up yet, but the confidence index suggests investors expect it to come. There are many things they might be worried about, yet they aren't.

Early this week Wall Street was still anxiously waiting for its yearend stock market rally. Stock prices were drifting sideways, and trading was in the doldrums. But if you consult one of Wall Street's analytical tools—the index of speculative confidence—you get the idea that such a rally may be near.

• **The Mechanics**—One way of working out a speculative confidence index is to divide some index of stock prices by an index of business activity. The ratio you get is supposed to measure investors' confidence in the future trend of stock prices.

For instance, if business activity goes down while stock prices remain about the same, the speculative index goes up. That is supposed to show that investors consider the business downtrend a temporary one. If business actually goes up, while stock prices remain the same or go up more slowly, the speculative index will go down. That indicates investors have some doubts as to the permanence of the boom.

• **High Level**—The index charted above is based on Standard & Poor's 90-stock index and the BUSINESS WEEK Index (page 13). It shows that speculative confidence is almost as high as it ever

was. Of course, that preliminary estimate of a rise in December could be deceptive. But even in November the index was higher than it had been almost any time during 1949 and 1950.

You can't take any kind of chart as a sure guide to what will happen next in the stock market. But this speculative index shows that investors aren't too worried about the future trend of stock prices.

Investors don't seem to be bothered about the fact that higher costs and taxes are cutting into corporate profits and have affected more than a few yearend extra dividends. The possibility of raw material shortages—a theme

**The Pictures**—Cover by James Cutter. Acme—25; Associated Photographers—30; Canadian Pacific Railway—96; European—19 (ctr., rt.), 60; Harris & Ewing—34 (ctr.); Int. News—24 (top, bot. lt.), 34 (lt.); Keystone—19 (lt.); Phototech Studios—53; Seaf Photo Service—36; Wide World—24 (bot. rt.); Dick Wolters—34 (rt.), 46.



Washington has taken up again recently—doesn't seem to worry them either.

• **Optimism**—In other words, buyers appear to think that inflation of one sort or another will continue over the long run and that it will push prices up. They don't anticipate, either, any temporary break in stock prices over the near term. For instance, Wall Street reports that mutual funds, pen-

sion trusts, and other canny institutional buyers of stocks are still on the buying side. They wouldn't be if they expected market reaction very soon.

Here are a couple of good reasons to bolster their feelings:

- The bargaining now going on in Pittsburgh between the steel union and U. S. Steel will last long (page 30).
- The fact that 1952 is an election year.

## 1951 Averages Cover Wide Variations

	1950 Year- End	1951 Price Range High Low	Recent Level	1951 Gains— Maximum Now
<b>Dow-Jones Industrial Stock Average</b>	235.41	276.37 238.99	265.48	17.4% 12.8%
<b>30 Stocks comprising average</b>				
Allied Chemical & Dye	\$59.87	\$77.50 \$58.00	\$74.75	29.4 34.9
American Can	93.25	118.75 93.62	109.25	27.3 17.3
American Smelting & Refining	36.63	51.62 35.25	48.37	40.9 33.1
American Tel. & Tel.	151.00	163.12 150.00	156.37	8.0 3.6
American Tobacco	64.62	68.87 59.00	60.00	6.6 -7.1
Bethlehem Steel	48.50	60.00 46.25	50.25	33.7 3.9
Chrysler	68.75	82.37 65.12	69.25	19.8 0.7
Corn Products Refining	68.37	79.75 66.00	68.25	16.6 -0.2
E. I. du Pont de Nemours	84.00	102.50 82.00	91.50	23.0 8.9
Eastman Kodak	46.12	51.75 41.12	49.37	13.3 7.0
General Electric	49.75	63.87 49.50	57.25	28.4 18.1
General Foods	45.62	48.62 39.87	42.25	6.6 -7.4
General Motors	46.25	54.00 46.00	51.00	16.8 10.3
Goodyear Tire & Rubber	33.00	50.00 32.87	43.87	81.6 33.9
International Harvester	32.25	37.38 30.50	34.75	16.9 7.8
International Nickel	36.25	42.37 31.75	41.37	16.9 14.1
Johns-Manville	47.75	70.50 47.00	66.00	47.6 38.3
Loew's, Inc.	15.62	19.87 14.75	17.25	27.2 10.4
National Distillers	27.62	37.25 26.50	33.25	34.9 20.4
National Steel	50.50	56.00 43.00	53.37	10.9 5.7
Procter & Gamble	70.75	80.00 62.75	66.37	13.1 -6.3
Sears, Roebuck & Co.	52.50	58.00 51.50	56.00	10.8 6.7
Standard Oil (Cal.)	45.93	55.12 44.00	50.25	30.0 9.4
Standard Oil (N. J.)	45.88	72.62 58.87	71.87	68.3 36.6
Texas Co.	41.12	59.75 44.75	55.62	46.3 38.3
Union Carbide & Carbon	55.12	66.62 53.37	62.37	30.9 13.3
United Aircraft	35.37	41.12 26.50	31.00	10.3 -13.4
United States Steel	42.12	47.75 37.62	39.25	13.4 -6.8
Westinghouse Electric	34.50	42.50 34.62	39.12	23.2 13.4
F. W. Woolworth Co.	44.25	46.25 41.62	42.75	4.6 -3.4
<b>Dow-Jones Rail Stock Average</b>	77.89	90.06 72.39	82.11	15.7 5.4
<b>30 Stocks comprising average</b>				
Atchafalpa, Topeka & Santa Fe	\$75.25	\$89.87 \$68.75	\$77.00	19.4 3.3
Atlantic Coast Line	70.25	82.00 61.75	75.50	16.7 7.6
Baltimore & Ohio	19.87	24.50 15.75	18.62	23.3 -6.9
Canadian Pacific	22.00	36.37 21.75	36.12	68.3 64.3
Chesapeake & Ohio	34.75	38.25 28.50	32.12	10.1 -7.6
Delaware & Hudson	44.37	53.25 41.25	43.00	20.0 -3.1
Delaware, Lackawanna & Western	13.37	17.25 10.62	13.37	20.0 -
Erie	19.25	24.87 16.75	17.50	20.2 -0.1
Great Northern (Pfd.)	49.50	57.75 45.75	51.00	16.7 8.0
Illinois Central	58.37	75.25 51.75	54.62	29.9 -6.4
Louisville & Nashville	50.00	59.50 48.50	53.00	19.0 6.0
New York Central	21.37	26.25 15.50	18.62	22.8 -12.9
New York, Chicago & St. Louis	36.40	47.25 34.75	36.37	20.0 -0.1
New York, New Haven & Hartford	17.50	25.62 14.75	15.87	46.4 -9.3
Norfolk & Western	49.50	52.50 44.00	47.50	6.1 -4.0
Northern Pacific	32.12	70.50 31.25	66.37	119.8 106.6
Pennsylvania	22.62	26.25 16.87	17.87	18.0 -31.0
Southern Pacific	66.50	74.37 57.37	59.75	11.8 -10.2
Southern Railway	50.75	64.00 46.75	50.25	26.1 -1.0
Union Pacific	105.00	109.50 97.75	99.00	4.3 -5.7

N. B. Where necessary, allowance has been made for this year's stock splits.

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# DEFENSE BUSINESS

## CHECKLIST:

### Defense Regulations

The following listing and condensed description cover all the materials and price-control regulations issued by the defense agencies during the preceding week.

#### Pricing Orders

**Capehart Amendment:** Permits pricing for products of a unit of a business where that unit produces similar products to the rest of the business. CPR 22, SR 17, Amdt. 1; CPR 30, SB 4, Amdt. 1 (eff. Dec. 10).

**Brand name manufacturers:** Revises definitions of "manufacturer" to permit brand name manufacturers to apply CPR 30 if they produce the same or similar commodities in their own plants or furnish the actual manufacturer of the commodity with the tools or dies used. CPR 30, Amdt. 24; CPR 67, Amdt. 5 (eff. Dec. 15).

**Machinery:** Establishes a tailored ceiling price regulation to cover sales of used industrial and construction machinery and related equipment. Not included are farm machinery and equipment and used machine tools. CPR 105 (eff. Dec. 17).

**Used passenger automobiles:** Extends from Dec. 20 to Dec. 31 the effective date for applying the new dollars-and-cents ceiling prices for all makes and models of used automobiles. CPR 94, Amdt. 1 (eff. Dec. 17).

**Chrysler Corp. autos:** Sets basic retail dollars-and-cents prices for Plymouth, Dodge, DeSoto, and Chrysler passenger automobiles. CPR 83, Sect. 2, Spec. Order 5 (eff. Dec. 13).

**Ford Motor Co. autos:** Sets basic retail dollars-and-cents prices for Ford, Mercury, and Lincoln passenger automobiles. CPR 83, Sect. 2, Spec. Order 6 (eff. Dec. 15).

**Adjustment applications:** Requires that applications by manufacturers seeking to install automatic higher ceilings under the Capehart Amendment, as well as additional requested information, be sent to OPS by registered mail. It also requires the manufacturer to wait 30 days after OPS acknowledges receipt before selling at his proposed adjusted ceilings. GOR 10, Amdt. 3; CPR 30, Amdt. 25; CPR 22, Amdt. 36 (eff. Dec. 18).

**Machinery:** Authorizes manufacturers of specified commodities to defer, at their option, the applicable effective

date of the machinery regulation until further action by OPS. CPR 30, SR 3, Amdt. 1 (eff. Dec. 13).

**Spinach:** Gives processors of canned spinach the option of computing ceilings under the canned vegetable regulation or of using their September selling prices as their ceilings. CPR 55, SR 8 (eff. Dec. 14).

**Cattlehides, kips, and calfskins:** Reduces ceiling prices of cattlehides by 5¢ a lb. and for kips and calfskins by approximately 18%. CPR 2, Rev. 2 (eff. Dec. 19).

**Floor coverings:** Withdraws the 15% increase in ceiling prices granted manufacturers and wholesalers of soft surface floor coverings last March. GCPR, Amdt. 2, Suppl. Reg. 11, Rev. 2 (eff. Dec. 19).

**Retail ceilings:** Suspends until further notice the processing of applications under Section 43 of CPR 7, which permits manufacturers of branded articles to establish retail and wholesale prices for such articles. CPR 7, Amdt. 11 (eff. Dec. 17).

**Wooden mine materials:** Permits producers and dealers of wooden mine materials in Michigan, Wisconsin, and Minnesota to add 35% to the highest prices they charged from May 24 to June 24, 1950. GCPR, SR 82 (eff. Dec. 19).

#### Materials Orders

**Scrap:** Requires an inventory report by all auto wreckers by Dec. 20, detailing the number of motor vehicles, car units, and amount of loose scrap they had on hand as of Dec. 1. M-92 (Dec. 11).

**Machine tools:** Grants to the machine tool industry preferential status on orders for controlled materials and component parts. M-11, Dir. 2, amended; M-5, Dir. 1, amended; M-1 Dir. 3, amended; NPA Reg. 2, Amdt. 1 (Dec. 11).

**Oil and gas:** Revises procedures used by U.S. and Canadian oil and gas operators in getting priorities assistance for purchases of controlled materials. M-46 revised; M-46 Sup. 1 revoked (Dec. 12).

**Cans:** Forbids a manufacturer to fill any order representing an unused quota for a previous quarter that will delay or displace orders representing current-quarter requirements. M-25, Dir. 2 (Dec. 12).

**Rubber:** Removes, as of Jan. 1, 1952, restrictions on the consumption of government-produced general purpose synthetic (GR-S) rubber and on the consumption of total amounts of new rubber. M-2 as amended (Dec. 14).

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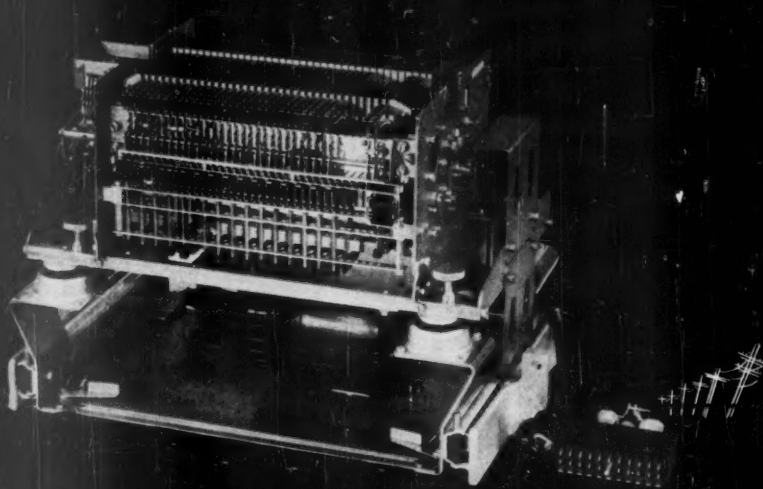


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# INTERNATIONAL OUTLOOK

BUSINESS WEEK  
DECEMBER 22, 1951



The State Dept. is going to try to get more economic aid for Europe.

Otherwise, State feels, troubles there could become deep enough to undermine the gains made by the Marshall Plan. That would cause middle-of-the-road governments, such as France's, to topple.

And it isn't just the economic equation that looks bad. Our political stock is dropping as we talk more and more of war strength, less and less about economic and social goals. Right now the ratio of European military to economic help is about 5 to 1. State thinks 2 to 1 would be a lot better.

So Secretary Acheson's 1952 problem is staked out for him.

He has to sell Congress on the idea that Europe needs more economic help. And he has to insist that we maintain the present level of military aid at the same time.

That means a fatter bill for U.S. taxpayers. For a cut now in military shipments would reduce defense plans even below the levels recommended by the Harriman Committee (page 19).

The world probably won't have a Korean cease-fire to help ring in the New Year. But Washington is optimistic that it's on the way.

There's still room for trouble. Revelations of bad treatment of U.S. prisoners, say, could touch off an explosion of public opinion, stiffen our bargaining tactics at Panmunjom.

But the prisoner problem isn't expected to torpedo the cease-fire talks. Both sides seem too anxious to arrive at a truce.

What will happen next in the Far East? Here's how top Washington analysts size up the post-truce picture:

The cease-fire, when it comes, will be about all there is for Korea. Few see any chance of a political settlement leading to unification.

That means United Nations troops will be nailed down in Korea for a long time to come.

On the other hand, there probably won't be a new, Korea-type aggression in Southeast Asia.

A Korean cease-fire would prove that Red China is anxious to avoid touching off a general war. A big push in Indo-China, for example, would run the same risk. So Mao Tse-tung won't move until he's good and ready to make the gamble (page 93).

Formosa is a different story. It's a sticky military and diplomatic mess for the U.S.

Mao claims sovereignty over the island; and he'd have some legal grounds for making a grab. If he did launch his armies and aircraft, the U.S. would try to defend Formosa. But we couldn't count on U.N. support—many of our allies insist that Formosa belongs to Mao, not to Chiang Kai-shek.

But Washington is betting that Mao will delay military moves against the Nationalist fortress. Instead, he'll make a strong diplomatic bid—with full backing from Stalin—for the island and for a seat in the United Nations, too.

Such a move would be sure to stretch our relations with our allies dangerously thin. We can hold Formosa by force—alikes or no. But Mao might

# INTERNATIONAL OUTLOOK (Continued)

**BUSINESS WEEK**  
**DECEMBER 22, 1951**

wiggle into the U.N. if we didn't oppose to the extent of using the veto.

Many Latin American regimes feel that de facto governments like Mao's should not be blackballed. And India has favored a U.N. seat for Peiping right along, could rally solid support from other Asian and the Middle Eastern nations. Even Britain and France might be tempted to go along.

Japan comes into the picture, too. The Japanese will certainly want to resume large-scale trade with Red China after a cease-fire.

Washington isn't too worried about Japan's mainland trade so long as it doesn't include strategic items. We think Japan can be persuaded to keep a ban on such trade and hope that the Japanese will decide not to tie their economy to China too close for comfort.

Prime Minister Churchill's Paris visit was mainly a gesture of friendship. Though he said nice things about European unity schemes (the Schuman Plan, the European Army), there's been no basic change yet in the British policy of noninvolvement. Churchill did promise, however, closer cooperation across the Channel.

Actually, Western Europe is currently point No. 3 in Churchill's master plan. His prime aim is to solidify the "fraternal association of English-speaking peoples"—i.e., closer ties with the U. S. Second is his desire to strike an over-all deal with Stalin.

Don't expect Churchill to come to Washington with a tin cup in his hand. He'll leave discussion of British finances to underlings. He wants to talk to President Truman in sweeping terms about Anglo-American world policy.

His argument will probably run: Lack of joint action between Washington and London is partly to blame for the confusion in Western Europe and the colossal mess in the Middle East.

There's a chance Washington will tell the British to forget their \$87-million interest payment on the 1946 loan. Just last week Churchill promised to pay up \$138-million in interest and principal on Dec. 31.

Secretary of the Treasury Snyder is seriously considering the move at the suggestion of W. Averell Harriman. The loan agreement has a clause allowing a waiver of interest payments if Britain's balance of payments is out of whack. But Churchill hesitated to ask for the waiver for political reasons.

There was big news in the world's money markets last weekend. Britain took the first cautious step toward greater sterling flexibility. Canada wiped out exchange controls entirely.

So far, London bankers are well satisfied with the results. Pressure on the free forward rate for pounds is only moderate.

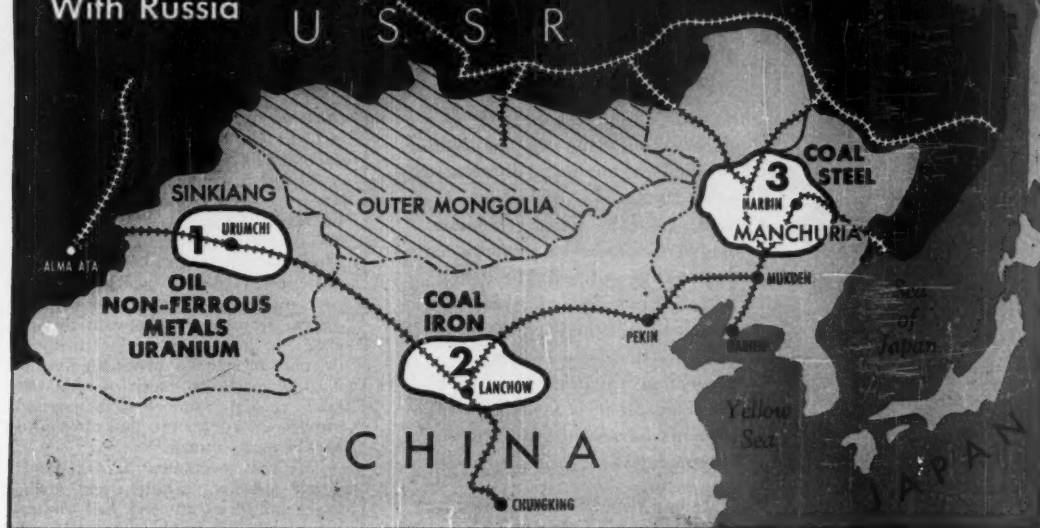
Though the Tory government favors convertible currencies in principle, progress will be very slow. Further relaxation depends on market pressures and the trend of London's gold reserves.

U. S. businessmen are tickled pink about Canada's decision.

It means that Canadians can spend their dollars freely anywhere in the world. And U. S. investors can take out any funds now frozen in Canada.

# BUSINESS ABROAD

China's New Railroads Will Link  
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## China's Red Regime: Stronger Than Ever

A year ago, just after the Chinese Communists intervened in Korea, Washington had high hopes that the Mao Tse-tung regime would be unable to withstand the strain of war. Some thought Mao might be toppled if the U.S. could get aid to the anti-Communist guerillas.

Today the U.S. is anxiously trying to negotiate a Korean cease-fire with that same regime. And in that one-year interval, two things have happened:

- Mao has tightened his hold on mainland China and has almost completely liquidated his opposition.

- The Korean War has cemented the Moscow-Peiping alliance more tightly than ever, made it the backbone of world communism. You can get some evidence of this from Peiping's decision to build a railway from North China via Sinkiang to the U.S.S.R. This is part of a vast long-range scheme to develop China's industrial resources and link them with Russia's.

So far Washington hasn't let the American people in on the real situation in China. But from Tokyo, Hong Kong, and New Delhi you can get

enough facts for a pretty clear picture of what's happened during the past year.

- **Mao on Top**—On the political front, the central fact is this: The Korean War has given Mao just the opportunity he needed to smash the opposition. Ruthless tactics have been used under a patriotic banner both to liquidate anti-Communists and to extend the control of the "People's Government" throughout China. In a sense, Stalin and Mao have used the war against the U.S. as the anvil on which to beat China into totalitarian form.

Since Korea, the Chinese Reds have eliminated nearly 2-million guerillas, most of them bandits or leaderless Nationalist troops. Also, they have liquidated about 1-million antigovernment rebels of various kinds—landlords, farmers, and village leaders. Together with a million or so unemployed, there are now 2-million to 3-million enemies of the Communists being reformed in state farms or conservation projects.

- **Effective Control**—From Peiping down through the smallest village, the government is based on a tripartite pattern—one-third Communist party mem-

bers, one-third other parties, and one-third neutrals. But the party politburo in Peiping establishes the policy, and the Reds at each government level make sure that the policy is carried out according to the party line.

Communist consolidation has been successful; there are few signs left of any strong protest. Most intellectuals seem to have been captured by the regime and now accept the philosophy that ends justify means. The comparative efficiency of the Communist bureaucracy has also helped to win them over. As one way of achieving an honest administration, officials are paid most of their salaries in the form of food, clothing, and housing.

- **Nothing to Lose**—Even from the military angle, Korea has had its advantages for Peiping. The bulk of Chinese thrown into the Korean War have been ex-Nationalists. From the Communist point of view, the dead are no loss, while those that live become battle-experienced veterans.

- **The Economy**—On the economic front, the Communist regime has managed surprisingly well.

It's true that Peiping's industrializa-

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tion program has been delayed; foreign exchange has gone toward war materials rather than machinery. And the U.S. embargo has shut off civilian imports such as cotton.

But, these losses are offset by several strong points:

• **Interregion trading**, which balances much of the loss suffered by severance of traditional foreign trade ties.

• **The new orientation** toward Soviet Russia and its European satellites — though China gets badly squeezed by Moscow's unfair pricing methods.

• **Big increases in home production** have resulted from the government's patriotic production drive, based on the slogan “Resist America.”

• **Tight Control**—China's farmers are undoubtedly paying through the nose, even more than under the Nationalists. But the farmers now feel that they own the land and perhaps really believe that their sacrifices contribute to China's greatness. In any case, they are so tightly controlled by the Chinese government that they dare not protest.

One big difference between this regime and the last is the fact that the government actually spends the income it collects, whereas much of what was taken by the Nationalists disappeared through private pockets and often into bank deposits abroad.

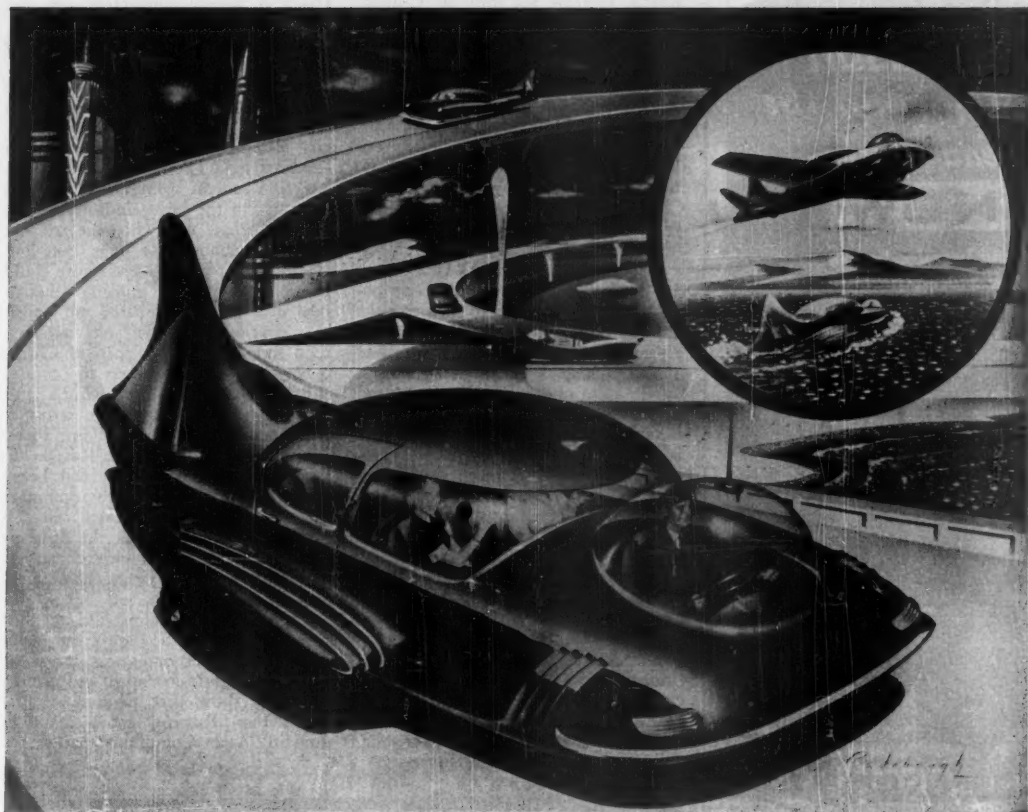
The Mao government has taken over heavy industry, utilities, and trade. Light industries are still half government and half private. In the end, though, it boils down to a de facto socialization of the whole economy: The light industries are completely dependent on government orders for their materials, selling price, and markets.

• **The People's Dollar**—Despite drastic currency controls, the Communists haven't been able to stabilize the “people's dollar.” China's currency sells at a heavy discount—not only in Hong Kong, but also in China's border cities. Inside southern China, prices have gone up from 25% to 50%. In Manchuria, imported low-grade Czech shoes cost \$25—more than the average monthly wage of a skilled worker.

All the same, there's no sign of a runaway inflation such as the one China had under the Nationalists. For one thing the Communists have kept the production and distribution of wheat and rice under very strict control. Food reserves have been built up, and prices of these foodstuffs are kept adjusted to urban wages.

• **Helping Hand**—During the Korean war, Russia has done a lot to ease the economic problems. The Russians have rebuilt Manchuria's heavy industry, restoring much of the machinery they looted in 1945-46. Most of Manchuria's production has gone for the Chinese armies. Even surplus food and raw materials, which used to be diverted to





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Siberia, now are fed into the Chinese economy.

Thousands of Russian technicians are at work throughout China. It's hard to assess their contribution, since Moscow keeps them carefully segregated. In Shanghai, for example, the Russians live in Hungjao, once an exclusive residential area. This compound is surrounded by barbed wire; not even a Chinese truck is allowed to enter. When the Russians go downtown, they are escorted by several Chinese guides.

In one field, though, it's known that the Russians are making a real contribution. They are helping to rush completion of the Huang Ho flood control project. In the past this river has caused untold damage to many thousands of square miles of arable land. This kind of Soviet technical assistance is getting as much favorable publicity in Asia as any Washington Point 4 program gets in the Western sphere—perhaps even more.

• **Railroads**—The most ambitious of the Soviet-Chinese projects is the construction of a railroad system that would connect Soviet Kazakhstan with Northwest and Central China. The projected line runs from Alma-Ata, capital of Kazakhstan, to Urumchi, capital of Sinkiang. From there it runs through Lanchow, the industrial and communication center of Shansi. From Lanchow, a branch line is to go northward to Paotow in inner Mongolia,

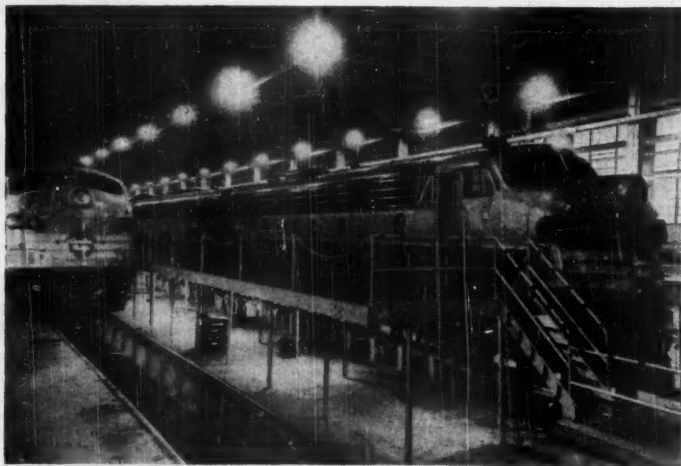
which is already connected with the South Manchurian railroad.

There's a mutual interest in linking Alma-Ata with Urumchi:

For more than a year two of the largest Soviet-Chinese mixed companies have been exploiting nonferrous minerals, oil fields—and reportedly uranium—in Sinkiang. The railroad from Alma-Ata to Urumchi would tie these new resources to the heavy industry of the Soviet Kuzbas. And when the rail link reaches Lanchow, the huge iron and coal reserves of Shansi and Kansu could be tied in with the growing Siberian steel industry. Too, Shansi and Kansu may develop their own steel industry, send supplies to other parts of China.

• **Soviet Mold**—Moscow, of course, still dominates both Manchuria and Sinkiang. Soviet troops have returned to Manchuria and are rebuilding bases. It's reported that there are Russian divisions in Sinkiang plus several heavy bomber bases. The Russians dominate not only military activity here, but also industrial enterprises. Still, the Russians are now adopting a policy of Soviet-Chinese integration—rather than merely a Soviet colonization.

Even more important is the fact that Peiping is rapidly becoming the headquarters for Communist revolution in Asia. Reports from Japan and Southeast Asia show that Chinese agents, rather than Russian, are increasingly directing Asian Communist parties.



## Diesels Start Work for Canadian Pacific

Dieselization is changing the face of mountain railroading in Canada. Above is Canadian Pacific Railway's newly opened, million-dollar diesel service plant at Calgary, Alberta, the first of its kind in Canada—along with two of CPR's new 1,500-hp. General Motors locomotives. This winter

these 208-ft. monsters and 26 others like them will be hauling freight between Calgary and Revelstoke, British Columbia, snaking across the Continental Divide through mile-high passes. The plant—and the locomotives—are part of a \$68-million, five-year dieselization scheme begun last year by CPR.

## Balancing Act

Finnish government is betting on timber exports to offset inflationary policies it has had to adopt.

It's enough to make inflation-shy European statesmen throw up their hands in horror. Finland, where prices have surged 1,000% above prewar levels, is fighting its own particular inflation with an inflationary policy. The unstable farmer-labor coalition government wants to cut taxes, scrap food subsidies, shave bank rates, and peg wages to living costs. Last weekend, Finland parliament O.K.'d the plan by a thumping 141 to 37 votes.

That kind of policy would be suicide in many countries. But it has a better than even chance of working in Finland, whose economy depends largely on a single product. That product happens to be timber and timber products—pulp, paper, lumber—all booming on the world market.

**Timber Support**—Thanks to the boom Finland has a tidy trade surplus, a solid reserve position. Terms of trade improve steadily. This allows Finns to finance a high level of imports, with which they can stifle inflation despite the inflationary internal policy. High returns on export taxes—one of the few that will remain—make it possible to reduce others without throwing the national budget out of whack.

Income taxes, except in top brackets, will be cut 10%. Purchase taxes on clothes, coke, rubber, fodder will be reduced or eliminated. Meantime, the export taxes will keep the brakes on spending by the exporters who are cleaning up in the timber market.

Bank interest rates will be cut from 7.5% to 5.5% with hopes that it will stimulate homebuilding. Food subsidies on bread and butter have already gone by the boards; later they'll be abolished for milk and cheese.

Wages have been tied to a new cost-of-living index. They'll rise automatically if the index rises more than 5% in a quarter.

**Compromise**—The wage deal looks inflationary. But actually, it represents a reasonable compromise between labor and the government. The workers get insurance against sharp increases in living costs. But the index is figured—with labor's consent—in such a way that it probably won't reflect the full extent of any future price rise. Government economists think that's about their best bet anyway: Present non-Communist union leaders are in constant danger of being outflanked by a vocal Communist minority if workers'



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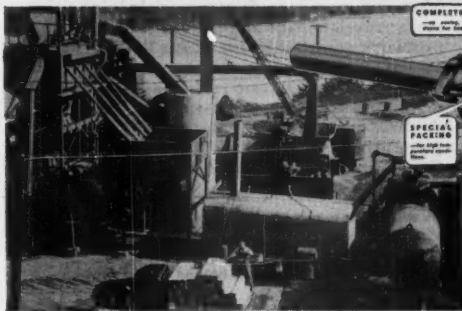
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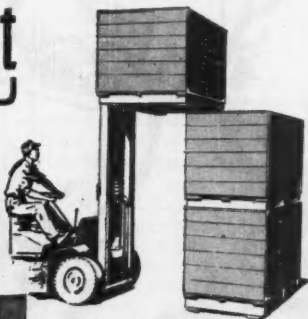
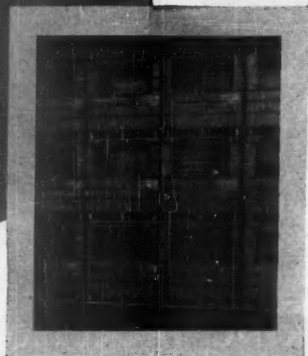
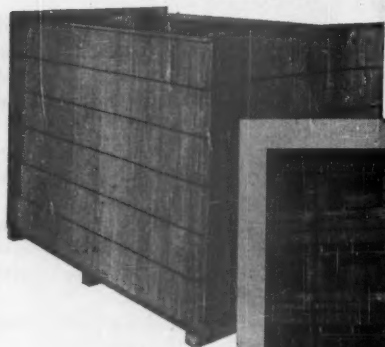


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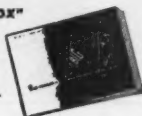

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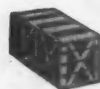
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living standards tumble. Better, say the Finns, to let the wage hike proceed according to plan than by fits and starts.

Finns admit that the scheme is a gamble—particularly when it comes to riding herd on wages and exporters' profits. But it has a good chance of success—and the alternative might be economic collapse, followed by a Communist coup. Characteristically, the Communists, their ears cocked across the Gulf of Finland to the U.S.S.R., are furiously attacking the new stabilization program.

## Workers Can Go Abroad Under New Thrift Plan

If you want a world-minded, globe-trotting labor force, take a look at a new travel promotion that's just been launched in New York. It's called the "Industrial Thrift Travel Plan"; under it management can send groups of 50 employees on a two- or three-week junket to Europe at rock-bottom prices. Once abroad, the travelers will meet their opposite numbers from European industry.

• **Broadening**—"Purposeful travel" is the tag put on the new scheme. For \$395 per person, the group flies to Britain and the Continent, spends two weeks seeing three or four countries. All expenses are included, even tips.

Each itinerary can be tailored to fit a group's special interests. For instance, if a group from a U. S. steel company decides to go, it can arrange to visit a British steel mill, then going by way of France or Benelux, travel down the Ruhr Valley and perhaps wind up in Switzerland.

• **Package Plan**—The Industrial Plan is an offshoot of the World Travel Plan and the European Hotel Plan. Both are brainchildren of Switzerland's fabulous merchant, Gottlieb Duttweiler (BW-Aug.25'51,p116). Costs are low because the industrial plan fits right into Duttweiler's package-plan, continental vacation system of transportation and hotels.

To get to Europe, the group has a choice of any airline that's a member of the International Air Transport Assn. If the group goes by DC-4, the minimum rate is \$395. More de luxe travel by Constellations and Stratocruisers and better facilities abroad can boost the cost to \$450.

U. S. businessmen can finance employees' trips wholly or partially as a bonus, probably getting tax exemptions on the expense. Or they can merely arrange it for employees, who will pay the bills themselves. World Travel Plan claims that several concerns may go along with the scheme next year.



## BUSINESS ABROAD BRIEFS



**Dollars on his mind:** Sir William Rootes, chairman of Rootes Motors, Ltd., auto manufacturers in Britain, heads a group of British businessmen dedicated to pushing sales of their products in the U.S. He's chairman of the new Dollar Exports Council, unveiled last week as a replacement for the Dollar Exports Board, which wound up its affairs last June. London's worsening dollar balance is responsible for the new drive on the U.S. market.

**Swedish interests** have bought control of the North Electric Mfg. Co., Ohio maker of telephone equipment. The Swedish firm, Ericsson Telephone Co. of Stockholm, controls 50 subsidiaries around the world, hopes North Electric will help supply some of the Ericsson operating companies in Latin America.

**This week in Colombia:** Sears, Roebuck & Co. is going ahead with its first retail store in Colombia, an \$800,000, air-conditioned building in Barranquilla. Opening is slated for early 1953. . . . A Colombian meat supplier has just signed a contract with Chicago importers to deliver five tons of beef daily—by air express.

**Ottawa has awarded the franchise** for the \$80-million Alberta-British Columbia pipeline to Trans Mountain Oil Pipe Line Co. TM says it will get busy on it next spring.

**Guatemala trouble:** U.S. and Canadian insurance companies operating there say they'll pull out if a pending law is passed. It would force the companies to invest nearly all their reserves in Guatemala and would make all policies payable in the local currency.

## ADVERTISERS IN THIS ISSUE

Business Week—December 22, 1951

<b>AIR MAZE CORP.</b> ..... 83	<b>KEASBEY &amp; MATTISON CO.</b> ..... 2
Agency—Batten, Barton, Durstine & Osborn, Inc.	Agency—Geare-Marston, Inc.
<b>ALLEGHENY LUDLUM STEEL CORP.</b> ..... 17	<b>THE LAPORTE MACHINE TOOL CO.</b> ..... 86
Agency—Walker & Downing General Agency	Agency—Wells Adv. Agency
<b>AMERICAN GAS ASSOC.</b> ..... 37	<b>LEHIGH-HORSEHEADS WAREHOUSE</b>
Agency—Ketchum, MacLeod & Grove, Inc.	<b>CORP.</b> ..... 44
<b>AMERICAN TELEPHONE &amp; TELEGRAPH CO.</b> 1	Agency—Burke Dowling Adams, Inc.
Agency—N. W. Ayer & Son, Inc.	<b>THE LORD BALTIMORE HOTEL</b> ..... 96
<b>F. E. ANDERSON OIL CO.</b> ..... 98	Agency—Emery Adv. Corp.
Agency—Fuller & Smith & Ross, Inc.	<b>THE MASON BOX CO.</b> ..... 82
<b>ARMCO STEEL CORP.</b> ..... 43	Agency—Howard-Wesson Co.
Agency—N. W. Ayer & Son, Inc.	<b>MCGRAW-HILL BOOK CO., INC.</b> ..... 98
<b>ASSOCIATION OF AMERICAN RAILROADS</b> ..... 77	<b>MCGRAW-HILL PUBLISHING CO., INC.</b> ..... 70-71
Agency—Benton & Bowles, Inc.	<b>MECHANICAL HANDLING SYSTEMS, INC.</b> ..... 38
<b>BABCOCK &amp; WILCOX CO.</b> ..... 67	Agency—Witte & Burden
Agency—O. & Tyson & Co., Inc.	<b>METALS &amp; CONTROLS CORP.</b>
<b>BALDWIN-LIMA-HAMILTON CORP.</b> ..... 12	<b>SPENCER THERMOSTAT DIV.</b> ..... 42
Agency—Ketchum, MacLeod & Grove, Inc.	Agency—Sutherland-Abbott
<b>BELDEN MFG. CO.</b> ..... 4	<b>METROPOLITAN LIFE INSURANCE CO.</b> ..... 41
Agency—The Fensholt Co.	Agency—Young & Rubicam, Inc.
<b>BITUMINOUS COAL INSTITUTE.</b> ..... 67	<b>THE MICHAELS ART BRONZE CO., INC.</b> ..... 74
Agency—Benton & Bowles, Inc.	Agency—Jaap-Ort Co.
<b>BRISTOL BRASS CORP.</b> ..... 39	<b>MINNEAPOLIS-HONEYWELL REGULATOR</b>
Agency—Sutherland-Abbott	<b>CO.</b> ..... 66
<b>COLSON CORP.</b> ..... 66	Agency—Foster, Case & Belding
Agency—Carl Lager, Adv. Inc.	<b>MINNESOTA MINING &amp; MFG. CO.</b> ..... 89
<b>CONTAINER CORP. OF AMERICA</b> ..... 3rd Cover	Agency—MacManus, John & Adams, Inc.
Agency—N. W. Ayer & Son, Inc.	<b>NATIONAL BLANK BOOK CO.</b> ..... 64
<b>CUTLER-HAMMER, INC.</b> ..... 32	Agency—Sutherland-Abbott
Agency—Kirkhauser-Drew	<b>NATIONAL MOTOR BEARING CO., INC.</b> ..... 95
<b>DAVIDSON CORP.</b> ..... 96	Agency—L. C. Cole Co.
Agency—Marsteller, Gebhardt & Reed, Inc.	<b>NEW DEPARTURE DIV., GENERAL</b>
<b>DOW CHEMICAL CO.</b> ..... 75	<b>MOTORS CORP.</b> ..... 18
Agency—MacManus, John & Adams, Inc.	Agency—Albert Frank-Guenther Law, Inc.
<b>DOW CORNING CORP.</b> ..... 62	<b>NORTON COMPANY AND BEHR-MANNING</b>
Agency—Dee Wagnitz Adv.	<b>CORPORATION</b> ..... 61
<b>DOWELL, INC.</b> ..... 46	Agency—James Thomas Chirurg Co.
Agency—MacManus, John & Adams, Inc.	<b>THE OSBORN MFG. CO.</b> ..... 20
<b>DRAVO CORP.</b> ..... 48	Agency—The Griswold-Ehrlman Co.
Agency—Ketchum, MacLeod & Grove, Inc.	<b>PITTSBURGH COKE &amp; CHEMICAL CO.</b> ..... 33
<b>C. A. DUNHAM CO.</b> ..... 87	Agency—Walker & Downing, General Agency
Agency—The Buchen Co.	<b>PITTSBURGH PLATE GLASS CO.</b> ..... 49
<b>E. I. du PONT de NEMOURS &amp; CO.</b> ..... 7	Agency—Maxon, Inc.
Agency—Batten, Barton, Durstine & Osborn, Inc.	<b>PRESSED STEEL CAR CO.</b> ..... 31
<b>EASTERN CORP.</b> ..... 97	Agency—Albert Frank-Guenther Law, Inc.
Agency—Sutherland-Abbott	<b>RECORDAK CORP. (SUB. OF</b>
<b>ELECTRIC STORAGE BATTERY CO.</b> ..... 14	<b>EASTMAN KODAK)</b> ..... 63
Agency—Geare-Marston, Inc.	Agency—J. Walter Thompson Co.
<b>ELWELL-PARKER ELECTRIC CO.</b> ..... 53	<b>REMINGTON RAND, INC.</b> ..... 94
Agency—The Bayless-Kerr Co.	Agency—Leeford Adv. Agency, Inc.
<b>EMPLOYERS MUTUAL LIABILITY INR.</b>	<b>REYNOLDS METALS CO.</b> ..... 89
<b>CO. OF WISC.</b> ..... 6	Agency—Prior, Robinson & Frank, Inc.
Agency—Hamilton Adv. Agency, Inc.	<b>SCAIFE CO.</b> ..... 81
<b>ETHYL CORP.</b> ..... 47	Agency—Walker & Downing
Agency—Batten, Barton, Durstine & Osborn, Inc.	<b>SCOTT PAPER CO.</b> ..... 36
<b>FEDERAL BUSINESS PRODUCTS, INC.</b> ..... 68	Agency—J. Walter Thompson Co.
Agency—Morton Freund Adv. Agency, Inc.	<b>SHARON STEEL CORP.</b> ..... 90
<b>FOOD ENGINEERING</b> ..... 72	Agency—McClure & Wilder, Inc.
<b>FRICK CO.</b> ..... 70	<b>STANDARD PRESSED STEEL CO.</b> ..... 76
Agency—Waynesboro Adv. Agency	Agency—R. E. Lovell Corp.
<b>H. B. FULLER CO.</b> ..... 42	<b>STONE &amp; WEBSTER, INC.</b> ..... 82
Agency—Olmstead & Foley	Agency—Doremus & Co., Inc.
<b>GENERAL BOX CO.</b> ..... 98	<b>SURFACE COMBUSTION CORP.</b> ..... 60
Agency—The Buchen Co.	Agency—Breson-Reichert, Inc.
<b>GENERAL ELECTRIC CO.</b> ..... 55	<b>UNITED STATES RUBBER CO.</b> ..... 8
Agency—G. M. Stanford Co.	Agency—Fletcher D. Richards, Inc.
<b>GENERAL ELECTRIC CO.,</b>	<b>VEEDER-ROOT, INC.</b> ..... 3
<b>CHEMICAL DEPT.</b> ..... 2nd Cover	Agency—Sutherland-Abbott
Agency—Benton & Bowles, Inc.	<b>VIKING PUMP COMPANY</b> ..... 57
<b>GLOBE AUTOMATIC SPRINKLER CO., INC.</b> 82	Agency—Walter E. Battenfield Co.
Agency—Marshall & Pratt Co.	<b>VISIRECORD, INC.</b> ..... 36
<b>THE H. F. GOODRICH CO.</b> ..... 68	Agency—Morton Freund Adv. Agency, Inc.
Agency—The Griswold-Ehrlman Co.	<b>WAGNER ELECTRIC CORP.</b> ..... 48
<b>THE H. F. GOODRICH CHEMICAL CO.</b> ..... 4th Cover	Agency—Arthur H. Mogge, Inc.
Agency—The Griswold-Ehrlman Co.	<b>WARNER &amp; SWABEY CO.</b> ..... 85
<b>GOODYEAR TIRE &amp; RUBBER CO., INC.</b> ..... 50-51	Agency—The Griswold-Ehrlman Co.
Agency—Kudner Agency, Inc.	<b>WARREN TOOL CORP.</b> ..... 96
<b>GULF OIL CORP.</b> ..... 11	Agency—Meek and Thomas, Inc.
Agency—Young & Rubicam, Inc.	<b>WEBSTER ELECTRIC CO.</b> ..... 27
<b>HOOVER ELECTROCHEMICAL CO.</b> ..... 35	Agency—Hamilton Adv. Agency, Inc.
Agency—Charles L. Bumrill & Co., Inc.	<b>WESTERN UNION TELEGRAPH CO.</b> ..... 69
<b>INDUSTRIAL TRUCK ASSOCIATION</b> ..... 64	Agency—Albert Frank-Guenther Law, Inc.
Agency—Ketchum, MacLeod & Grove, Inc.	<b>WESTINGHOUSE ELECTRIC CORP.,</b>
<b>INTERNATIONAL MINERALS &amp;</b>	<b>STURTEVANT DIV.</b> ..... 8
<b>CHEMICALS CORP.</b> ..... 29	Agency—Fuller & Smith & Ross, Inc.
Agency—C. Franklin Brown, Inc.	<b>WOMAN'S DAY</b> ..... 79
	Agency—Paris & Peart Adv.

## Christmas 1951: Toward the Tallest Star

Christmas, more than any other festival or holiday, gets under the skin. It is the season of wonder. You can touch it and taste it, and smell its spices. You can share its special warmth and hear its matchless music.

Yet that is not the tenth part of it. The miracle of Christmas lies in its unrivaled power to probe past our senses and pierce the tough crust of workaday events and concerns that shut us in. Deep inside it kindles the faith we live by and sparks again a resolve to make a better job of living. It evokes all sorts of generosity from our better natures like the Detroit taxi driver's offer of free rides to churchgoers of all faiths.

Some years ago the Archbishop of Canterbury declared to the House of Lords what he conceived his mission as a member of that body to be. "It is," said the late great William Temple, "to remind this House of its obligation to God."

Christmas does for countless millions round the world what Temple undertook to do for the peers of the realm. The secret of its power is that it links up each person who responds to its appeal with a reality above and beyond himself. It's a fact as old as the star over Bethlehem, as new as the youngest child standing enthralled before the glitter of his first tree. It is the wonder of new birth in a world feeling old and betrayed, the gentle magic of the meek and lowly before whom power kneels.

The world between Christmases is, of course, the one that occupies us. In the year now running out it has crowded in with events good and bad. The cataclysm of general war has not fallen upon us. We and our friends throughout the free world have gathered more strength against the Communist threat to throw us back a thousand years into medieval night. It has been a year, too, when our material needs as a nation have been well looked after.

But this Christmas finds concerns and fears among us, too. There is Korea—an open vein where the lifeblood of many peoples drips away. A year ago Korea was a shocking pain. This Christmas it is a sullen ache that no one knows how to cure. And in millions of homes there is a gnawing anxiety.

There is uneasiness, too, over our responsibilities as the chief peacemaker in the world. We have set ourselves the hardest task that a nation of energy and enterprise can undertake—to arm fit for meeting any foe and yet keep careless fingers off the triggers and truly seek peace by peaceful means. Arms we must have to command the foe's respect, but peacemakers must own talents besides those of munitions makers. That our ideas for peacemaking include few beyond more and bigger weapons concerns many of our people today.

Then this Christmas lights up the stain upon the

year left by the erupting volcanos of corruption and scandal. As Americans we are seeing in events clear enough for anyone to understand that our facade of official morality is riddled with personal compromise. Among public officials, bribe takers, bribe givers, and plain citizens there has settled in an appalling haziness as to what is right and wrong. And to find immorality pleading legality as a defense darkens an already murky scene.

The good things of the year stand reflected in the blaze of Christmas lights. For the anxieties, the cares, and the strains these same lights are an X ray, pointing to the trouble and to the ultimate remedy: personal searching and dedication. For Christmas is compellingly personal. No matter how organized and institutionalized our efforts between Christmases may be, at this festival season even the busiest businessman wants to buy the children's toys himself, wants to recapture the personal content of living that high-speed modern life almost squeezes out.

Happiness for perplexed men came out of that first Christmas, and joy to the world hallowed simple seeking for a place to lodge. We struggle with forces that are huge these days, but the best hope to build an ampler home for the man's free spirit still lies in his striving toward the tallest star.

## Innis for Williams

Because economics is the theoretical study that comes closest to practical business, it's appropriate to take note of an upcoming change of command. John Henry Williams of Harvard goes out as head of the American Economic Association. Harold Adams Innis of the University of Toronto comes in.

Both men have shown they know how vital is the relation between the ivory tower and the market place. Both bring an international breadth of view to a field that needs it.

Williams, a Welshman by birth, is America's sagest economist. Dean since 1937 of Harvard's Graduate School of Public Administration, his reputation for wise and seasoned counsel goes far beyond the Yard. Innis of Toronto, another graduate dean, also has shown skill with problems of private industry and of public service.

Economic problems that puzzle executives and theorists know no national lines. The hands-across-the-border action of the American economists in choosing Innis to succeed Williams adds up to a meaningful symbol. He will bring a fresh northern view to problems linking Canada and the United States, and the world.

## John Dewey

*on democratic action*

There has never been an autocrat, big or little, who did not justify his conduct on the ground of the unfitness of his subjects to take part in government.

What the argument for democracy implies is that the best way to produce initiative and constructive power is to exercise it. Power, as well as interest, comes by use and practice.

*(Democracy and Educational Administration, 1937)*



### EXPLANATION OF PROPOSED AMENDMENT

A comparison of Section 2 of Article XIV (which provides for the amendment of the Constitution) as now in force and as sought to be amended by the proposed amendments to the Constitution.

#### Provision of Present Constitution

1. Amendments to not more than three articles may be submitted at any session.
2. Requires the votes of a majority of all electors voting at the election.
3. The form of the ballot for submitting constitutional amendments is prescribed by action of the General Assembly.

For this purpose, the General Assembly passed it on November 7, 1900. Following the election it was

#### Changes in the Proposed Amendment

1. Amendments to not more than three articles may be submitted at any session.
2. Requires the votes of a majority of all electors voting at the election.
3. The form of the ballot for submitting constitutional amendments is prescribed by action of the General Assembly.

YES
NO



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